DRUG & COSMETIC INDUSTRY

JANUARY, 1951

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THOMAS R. FARRELL, Editor
FRANCIS CHILSON, Production Consultant
MILTON A. LESSER, Technical Editor
HARRY G. KELBLY, Raw Material Editor
FRANK CHILD III, News Editor
MAX FRANKEL, Art Director

The Drug and Cosmetic Industry is published monthly by Drug Markets, Inc., Frazer V. Sinclair, President and Treasurer, Thomas R. Farrell, Vice-president and Secretary. Publication Address, 28 Renne Ave., Pittsfield, Mass., U. S. A. Editorial and General Office, 101 West 31st St., New York 1, N. Y., U. S. A.

Business Manager, Frazer V. Sinclair; Advertising Representatives, P. W. Alexander, Walter M. Brauneiss, C. R. Keeley. Production Manager, Katherine Hyde; Circulation Manager, Harry G. Kelbly.

Chicago Advertising Representative: Dwight H. Early, 100 No. LaSalle St., Chicago 2; Telephone, CEntral 6-2184.

Subscription price — $3.00 a year, in advance, Foreign Countries, $5.00. Single copies, 35c; Back issues, 50c. Entered as Second Class Matter, January 1, 1928, at the Post Office at Pittsfield, Mass., under the Act of March 3, 1879. Member of Audit Bureau of Circulations.

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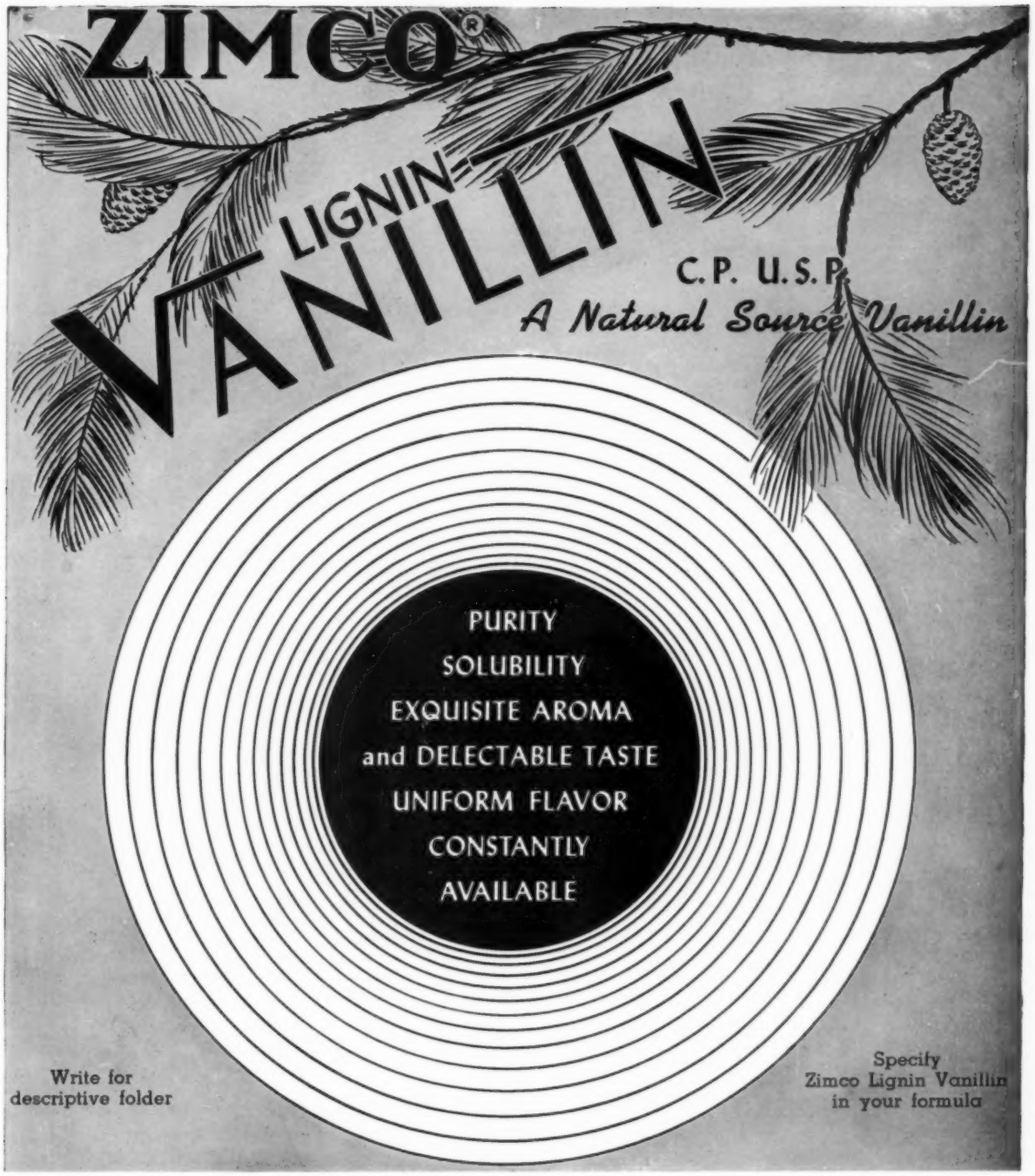

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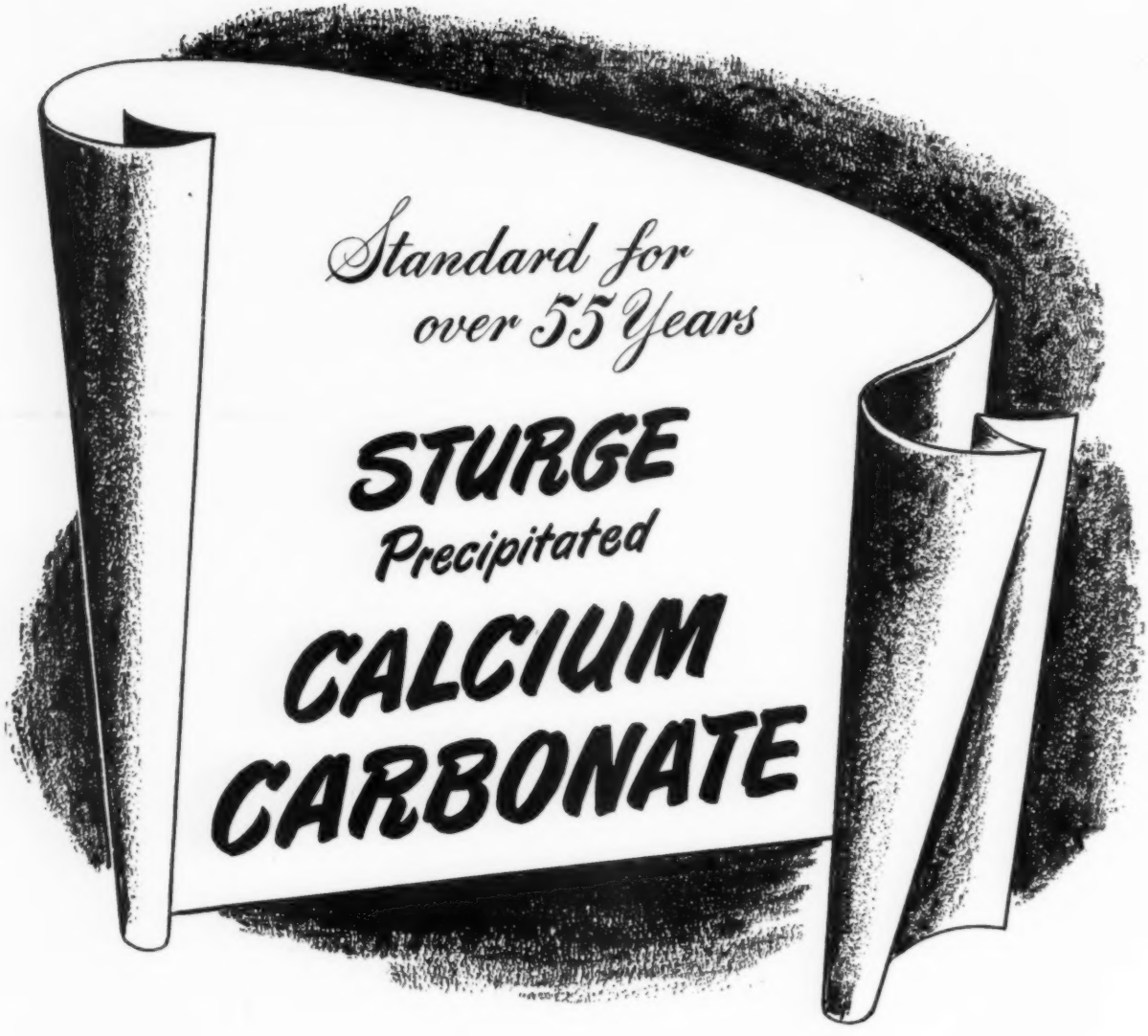

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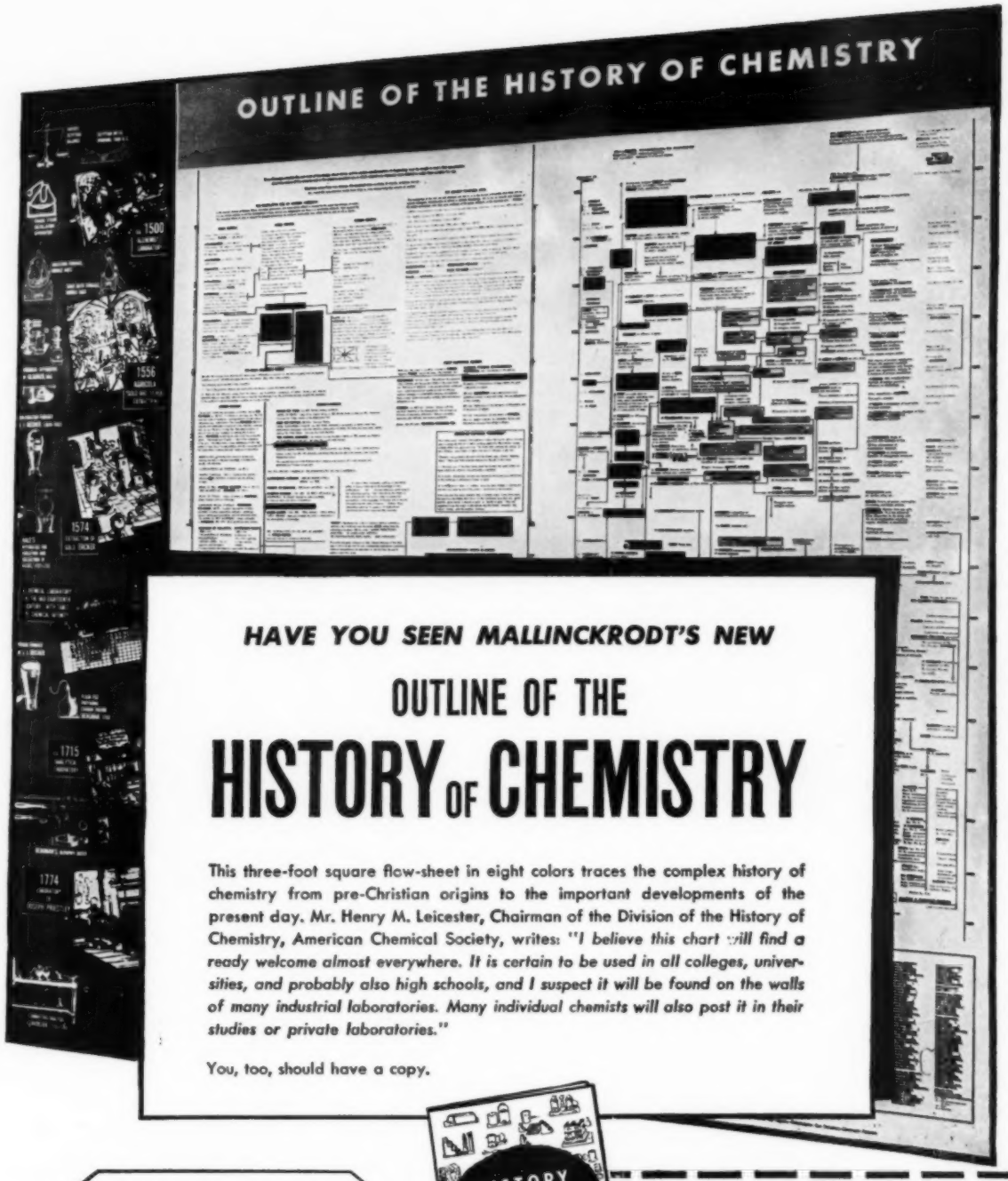

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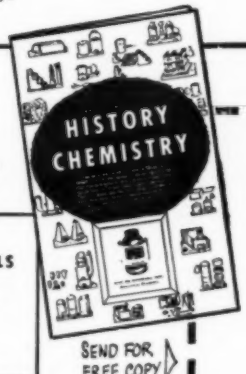

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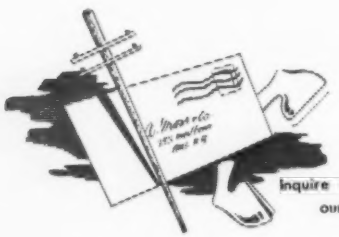

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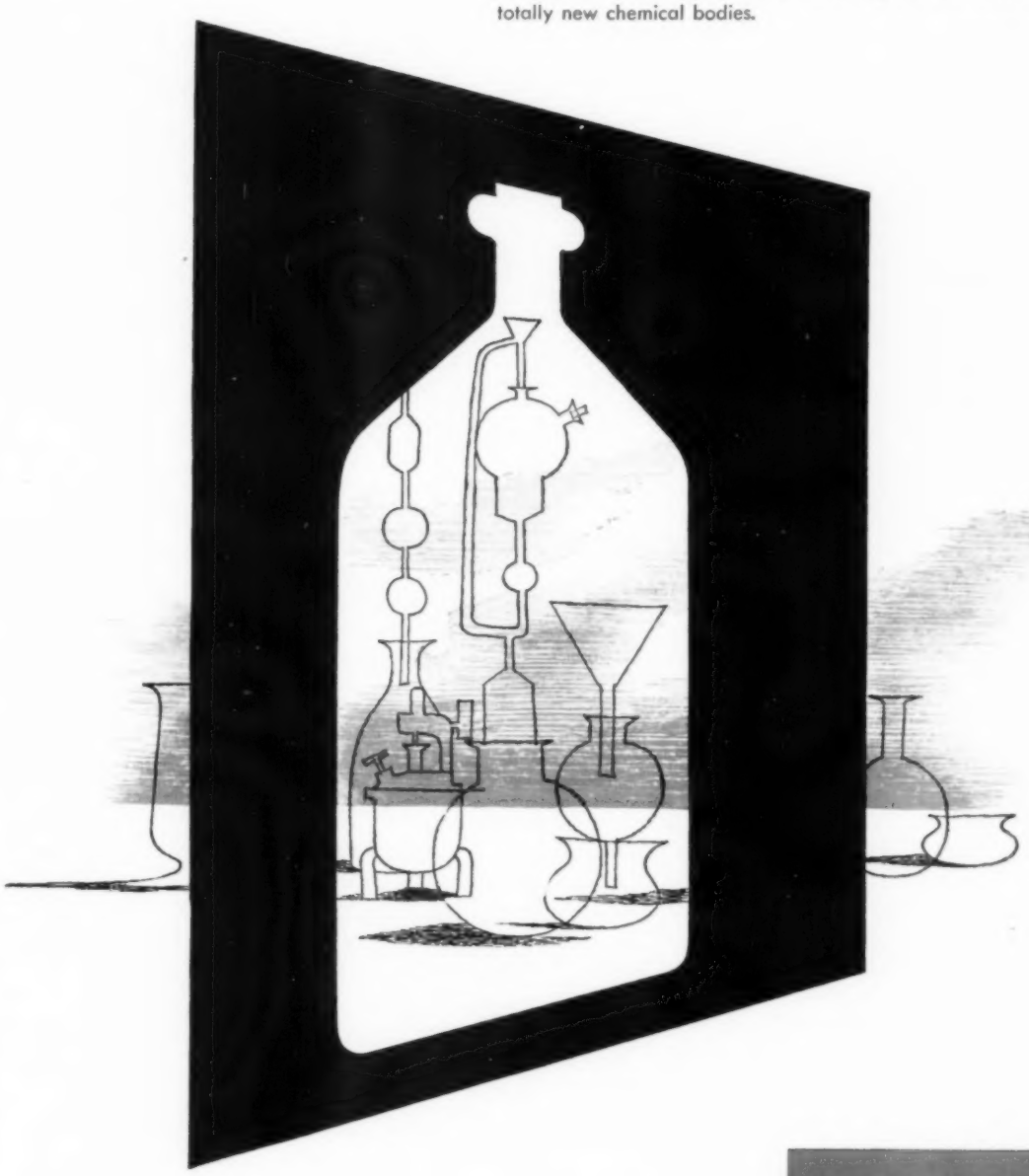

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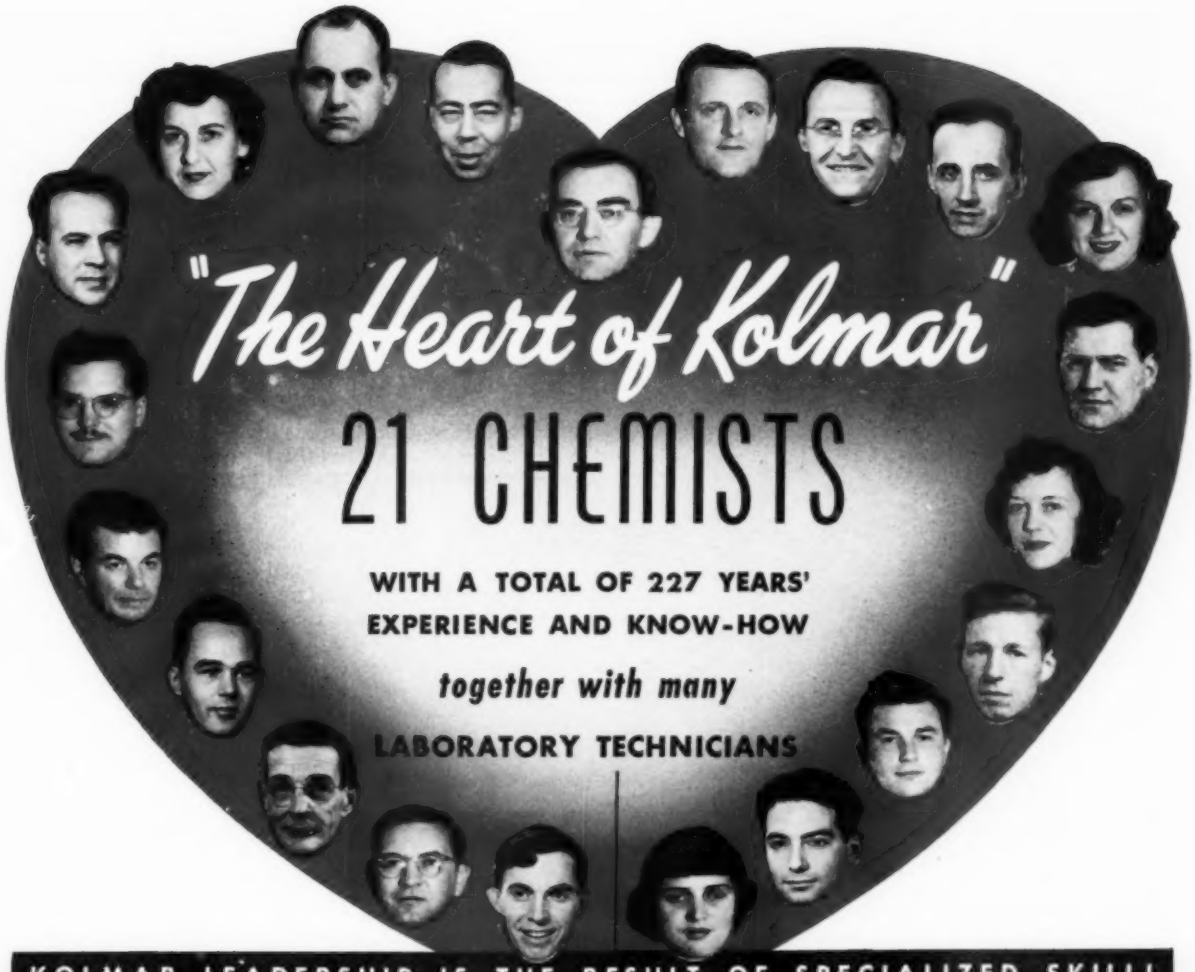
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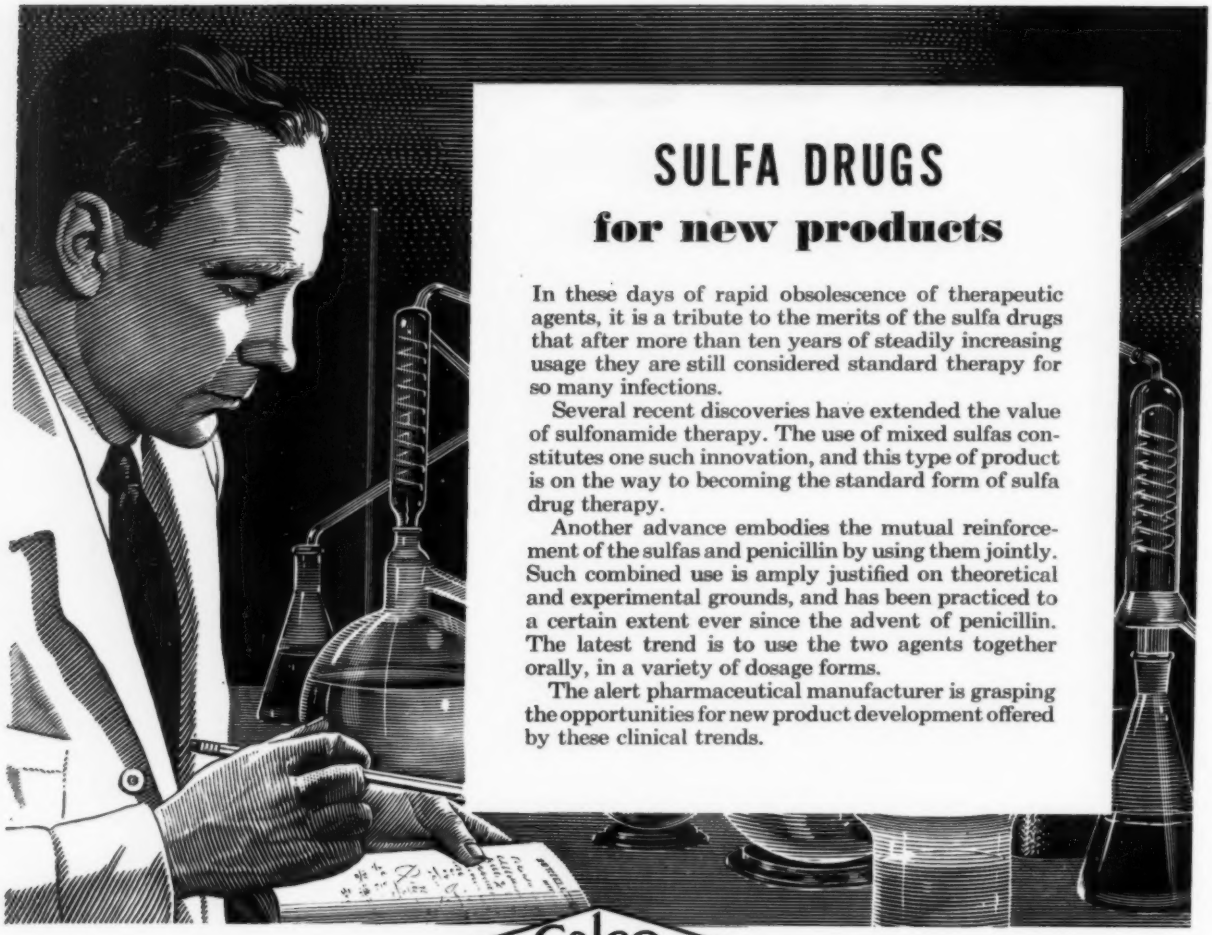

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- 3,4-Dichlorobenzoyl Chloride
- Anisoyl Chloride

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- Benzyl Chloride
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- Para-Chlorobenzyl Chloride
- 2,4-Dichlorobenzyl Chloride
- 3,4-Dichlorobenzyl Chloride

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KEEPING POSTED

Cash Register Receipts Are Price-Cutting

THE ISSUANCE of "cash purchase receipts" or "cash register receipts" which are given value toward the purchase of articles at retail, constitutes violation of the fair trade act of New York State, in that they constitute price-cutting. This has been decided by the Court of Appeals—the highest court in New York State—in the case of Bristol-Myers Company vs. Picker Pharmacy, Lynbrook, N. Y. Picker Pharmacy is a member of what is known as the Lynbrook Dividend Club, Inc., which is a group of retailers dealing in non-competitive goods who have agreed to give cash register receipts to their purchasing customers, these receipts respresenting 2½ per cent of the amount of each purchase. When a customer has purchased $10 worth of merchandise from members, he may redeem the receipts for 25 cents worth of merchandise at the store of any dealer who is a member of the dividend club.

On May 25, 1950, Justice Ferdinand Pecora found for Bristol Myers in the Supreme Court. This decision was later reversed by the Appellate Division, but the Court of Appeals reversed the Apellate Division and upheld Judge Pecora.

The matter was complicated because previous decisions rendered in the case of Bristol-Myers vs. Lit Bros. in Pennsylvania and the case of Weco Products Company vs. Mid-City Cut Rate Drug Stores in California were unfavorable. These decisions were concerned with trading stamps and were seemingly conclusive. In spite of these decisions, Bristol-Myers carried the Picker case to the highest New York court, and won. The decision was five to two. In the majority opinion, the court said in part:

"We are all agreed that cash register receipts have value that reduce the cost of the branded goods and that there is in consequence a mathematical reduction in the selling price, and the majority agree that this is price cutting. That this was done knowingly is beyond dispute, for it is axiomatic that one intends the natural consequences of his own acts, and in this case the members of defendants' club were keenly aware of what they were doing, as evidenced by their failure to invite any competitors to join with them. Moreover, the statute does not require a showing of motive or willful intent to *injure* but merely—what has been abundantly shown here—willfully and knowingly *selling* at any reduced price. Such selling 'is an assault upon the good will' and constitutes 'unfair competition;' the manufacturer whose good will is thus assaulted is thereby damaged, and is entitled to injunctive relief to prevent continuing damage.

"Defendants have also raised the constitutional argument that to prohibit cash discounts on retail sales of minimum priced articles violates due process, in that such a practice has no relation to the only constitutional object of the statute, the protection of good will. Such an argument assumes that the practice in question has no effect on good will because it did not result in price cutting, and I think it is clear that this is not so. The regulation of otherwise legitimate practices in the valid exercise of police power which has here been sustained must be distinguished from absolute prohibition of legitimate trade devices or from regulation unconnected with any proper object. The Fair Trade Law constitutes a lawful limitation upon the doctrine of freedom of contract."

Management Awards

TEN COMPANIES in the drug manufacturing field were among the 238 firms throughout the United States and Canada being awarded Certificates of Management Excellence for 1950 by the American Institute of Management. The drug companies honored are Abbott Laboratories, Bristol-Myers Company, Chesebrough Mfg. Co., Johnson & Johnson, Mead Johnson & Co., Merck & Co., Parke, Davis & Co., Smith, Kline & French Laboratories, E. R. Squibb & Sons, and Sterling Drug, Inc.

The awards, to be bestowed annually hereafter, are based on a continuing study of more than 2,000 firms, designed to provide a base for research into corporate policies and procedures. In weighing the merits of each management, credits are given for excellence in ten separate fields—economic function, corporate structure, health of earnings growth, fairness to stockholders, research and development, directorate analysis, fiscal policies, production efficiency, sales vigor, and executive evaluation.

"The purpose of the awards," according to Jackson Martindell, president of the Institute," is to encourage management in all lines of business to give due weight to all ten factors, rather than to concentrate—as many do—on only one or two."

Compound F Synthesized

MERCK & CO. has announced the synthesis of Kendall's Compound F, 17-hydroxy-corticosterone, described as the only known substance believed to possess antirheumatic activity comparable to that of cortisone and ACTH. The synthesis was accomplished by Drs. Norman L. Wendler, Robert P. Graber, Robert E. Jones, and Max Tishler, director of developmental research at Merck. Like the complex synthesis of cortisone, the synthesis of Compound F starts with desoxycholic acid, the procedure requiring two more steps than the cortisone synthesis.

While it is not yet known whether clinical use of this material will present any advantage over cortisone, the new synthesis will make possible a thorough pharmacologic and clinical investigation. Merck officials state that these trials will begin immediately and that it would require at least six months to appraise accurately the therapeutic activities of this hormone, to compare them with the results already obtained with cortisone, and to determine the biological effects produced by Compound F. If Compound F shows promise as a medicinal agent, there is every indication that substantial supplies could be made available within a matter of months, assuming that the necessary equipment can be obtained.

Compound F, like cortisone, is one of the complex substances produced by the outer layers of the adrenal glands, which play a vital role in the functioning of the body. It was isolated from beef adrenals during the latter 1930's by Professor Tadeus Reichstein of the University of Basle, Switzerland, and independently by Dr. Edward C. Kendall and his associates at the Mayo Clinic. Recently, there has been considerable interest in Compound F because of preliminary medical trials which suggest that this substance has essentially the same activity as cortisone. These trials have been narrow in scope because of the small amounts of Compound F available. Workers in a number of laboratories have prepared limited quantities by biologic methods; but until now this substance had defied all attempts at chemical synthesis, in spite of its structural similarity to cortisone.

Fair Trade Gains

THE MOST significant gains since the depression were scored in 1950 by the voluntary fair trade laws, and were made in the face of growing consumer pressure on prices spurred by inflation, according to Dr. John W. Dargavel, chairman of the Bureau of Education on Fair Trade. Court approval of fair trade during the past year was evident in the record number of favorable decisions, Dr. Dargavel declared, adding that in the legislative field "not a single repeal bill in any state legislature got to first base." "These victories are all the more remarkable because they were not won in a setting of economic depression but against a background of mounting consumer pressure on prices and an outbreak of price wars, discount houses and other deceptive dodges which threatened earlier in the year to reach epidemic proportions," he said, continuing, "As inflationary pressures mount dangerously, those with axes to grind will seek to make fair trade an innocent scapegoat for high prices. It is imperative to etch in the public mind the true facts concerning fair trade's record in resisting inflation.

Five efforts to repeal state fair trade laws were defeated or withdrawn in 1950. Three of these bills were introduced in Louisiana, one in Rhode Island, and one in Mississippi. The Supreme Courts of Tennessee and Mississippi upheld the constitutionality of the fair trade acts of these two states during the year, thus becoming the 17th and 18th states to take this action, out of the 45 states which have fair trade acts in effect. Also during 1950, a record-breaking number of injunctions restraining price-cutters were issued by the lower courts of the several states.

Health Information Foundation Progress

THE HEALTH Information Foundation reports on its progress. In the collection of facts about basic health facilities, the Foundation is now completing a study of a multi-test health clinic in Richmond, Virginia. This clinic was undertaken locally as a community-wide project for the discovery of several types of illness simultaneously in their early and remedial stages. The Foundation seeks to discover the effectiveness of the Richmond plan as a pattern in this field of preventive medicine.

To discover a pattern whereby medical and lay people can appraise their community health facilities themselves and chart a program for future health progress, the Foundation is providing the leadership for a test survey in a small mid-western city. A committee of recognized authorities is assisting in development of this study which will be carried out by a leading university.

To gain information about the incidence of catastrophic illness, its economic effects upon the families involved, and the possibility of insuring against such illness, the Foundation is cooperating in another research project. A contribution of $7,500 to the University of Pennsylvania is paying for the first phase of this study.

The American Hospital Association is currently instigating a study to evaluate hospital finances, need and demand for services, utilization of facilities, and system of payment. It wil also analyze the effect of the advancement in medical techniques on charges to the individual, and will attempt to establish means to obtain the highest quality services at the lowest cost. Because of the importance of this research to the entire subject of health care, the Foundation has pledged $50,000 to the furtherance of this two-year project. With contributions from other sources, the sum of $425,000 of a total budget of $500,000 is already promised.

Work preliminary to a study of the entire subject of payment for comprehensive medical and other health care has been begun by three Foundation advisory committees in order to develop best methods for extending such care to everyone regardless of financial means. Top ranking leaders, representing the Blue Cross, Blue Shield and private insurance plans are members of these committees.

In the distribution of information, the Foundation employs the following means, among others: Speeches by Foundation President Admiral Blandy, including talks before national meetings of drug associations, before lay audiences, and on radio and television: in all of these talks the Admiral tells of the aims and accomplishments of the Foundation.

Streptomycin Royalty Suit Settled

IN SETTLEMENT of the suit brought by Dr. Albert Schatz against Dr. Selman A. Waksman and the Rutgers Research and Endowment Foundation, Dr. Schatz, co-discoverer of streptomycin, whose name

appeared on the patent application, will receive 3 per cent of the royalties beginning October 1, 1950, as well as $125,000 for assignment by him of his rights in Canadian, New Zealand, Japanese, and all other foreign patent rights to the Foundation. Dr. Schatz has retracted his charge that Dr. Waksman has used "fraud and duress" to induce him to assign to the Foundation his rights in the streptomycin patent.

Eighty per cent of the royalties under the patent will remain in the Foundation. Of the remaining 20 per cent, half or 10 per cent will continue to be paid to Dr. Waksman. The other 10 per cent will be distributed in two ways: 14 of those most closely associated with the work in streptomycin will share in the royalties accruing subsequent to October 1, 1950; 12 others who were less directly associated with the work will receive cash bonuses. Dr. Schatz will receive the largest share—3 per cent—and others will share in varying amounts ranging upward to 2 per cent. Net royalties to September 30, 1950 were approximately $2,360,000.

24 Oldest Drug Houses

THE TIME has again arrived to make additions to our list of oldest drug houses. During the month of December we received letters from three firms who point out to us their early beginnings. First there is the firm of Caswell-Massey Co. Ltd. whose letterhead bears the statement, "The Oldest Chemists and Perfumers in America, Established 1752." At the bottom of the letterhead is the following statement: "Since the Time of George Washington Caswell-Massey has filled Over Ten Million Prescriptions!" The letter, written by M. S. Taylor, Manager, comes from the retail drug store at 518 Lexington Avenue at 48th Street, New York, and contains the following statement:

"Caswell-Massey Company Limited was founded in Newport, R. I., in 1752 and has been in continuous existence to the present day. Our activities comprise the manufacture and distribution of medicinal specialties and toilet articles, being particularly known for our cologne and toilet waters and perfumes. We also maintain our historic retail pharmacy in New York City. This pharmacy is now in its eleventh million of prescriptions." So this firm predates even Schieffelin and goes at the top of the list.

Boericke & Tafel, Inc., Philadelphia, call our attention to the fact that they were founded in 1835 and therefore deserve a place well up on the list. The firm's letterhead describes them as "Homeopathic Pharmacists," and as "Importers and Publishers." However, with his letter, Ira M. Simmons, treasurer of the firm, includes a special salute from a special issue of the Philadelphia Magazine devoted to century-old business houses. This reads:

"One of the commercial assets of the Philadelphia area which most people never have had occasion to consider, is the diversified selection of wild plants and flowers suitable for the manufacture of homeopathic drugs.

"Boericke & Tafel, the oldest homeopathic pharmacists in the United States, lay much of their success to this availability of raw materials. Any day during the Spring, Summer, or Winter, their trucks may be seen pulled to the side of the road while their experts are gathering leaves, flowers, and seeds at the precise season when their healing potentialities are at their height.

"Boericke & Tafel was founded in 1835 when the science of Homeopathy was young. The main office at 1011 Arch Street now has branches in New York, Chicago and Pittsburgh, servicing the entire nation and 48 foreign countries."

The third company to be added to the list is the Arlington Chemical Company, which the Assistant Secretary David B. Sabine, writes us was founded in 1876, the same year as Eli Lilly was founded. This brings Arlington into the list by a tie with Lilly, but because of alphabetical listing of companies founded in the same year, the company appears ahead of Lilly on the list. This brings the list up to a total of 24, which is just three times the number which we originally published from the Reed & Carnrick Quarterly. The list now reads:

Casswell-Massey Co. Ltd.	1752
Schieffelin & Company	1781
The Tilden Company	1824
The Wm. S. Merrell Company	1828
McKesson & Robbins	1833
Strong Cobb & Co.	1833
Boericke & Tafel	1835
Otis Clapp & Son	1840
Smith, Kline & French	1841
Carroll Dunham Smith Pharmacal Co.	1844
Sharp & Dohme	1845
Chicago Pharmacal Company	1855
Hance Bros. & White Co.	1855
William R. Warner & Co.	1856
E. R. Squibb & Sons	1858
Reed & Carnrick	1860
Wyeth, Inc.	1860
The Burroughs Bros. Mfg. Co.	1863
Buffington's	1865
Parke, Davis & Company	1866
Henry K. Wampole & Co.	1872
The Maltine Company	1875
The Arlington Chemical Company	1876
Eli Lilly & Company	1876

Two Recent Discoveries

LOOKING back at the turmoil and excitement caused by the introduction of a new type dentifrice and a new type cold remedy within the past couple of years, both of these developments have resulted in a new factor establishing for himself a real position in each of these two fields despite the strong efforts of companies long established in these two fields to prevent just such a thing from happening. And these products gained their enviable positions in the face of the fact that the original promise held out for each of these new developments was never fulfilled. Certainly the claims originally held out for ammoniated dentifrices have not been proven. And certainly the belief that the common cold was due to an allergic condition which, if treated early enough with an antihistaminic, would never develop, is far from the actual conditions resulting from general use of this type of product. Rather than "aborting a cold," which was the original idea of Dr. Brewster, the products are now offered to stop the symptoms of a cold, which is quite another matter and which makes these products merely competitive with aspirin and other combinations which have long been sold on the claim that they relieve the symptoms of a cold. Thus, the antihistaminics, at least as far as their cold remedies are concerned, are just another type of product which some people will find helpful, while others will stick to the older remedies which they have been using for many years.

As regards the ammoniated dentifrices, the theory that a low 1. a. count is essential to elimination of

dental caries has never been definitely established, and neither has the theory that ammonia ions decrease the l. a. count in the mouth been definitely established. Contrarywise, it has been established that if the teeth are brushed immediately after eating, dental caries will be kept at a minimum. Therefore, the main thing is the keeping clean of the teeth, and not any particular ingredient. Large selling dentifrices are combinations of the most satisfactory ingredients to do a good cleansing and polishing job on the teeth—plus an appealing flavor and a pleasant after-taste. The one thing which the ammoniated dentifrice flurry accomplished was to stimulate among the public the need for daily use of a dentifrice, because the public certainly learned through the extensive advertising used during the battle, that cleanliness of the teeth is most vital to a healthy mouth.

Antibiotics and Hospital Beds

AN INDICATION of the extent to which recent medical discoveries, in particularly the development of antibiotics, have increased the availability of existing medical facilities was given recently by Thomas J. Winn, of Chas. Pfizer & Co. Mr. Winn told a United Hospital Fund Campaign audience in Brooklyn:

"You would normally expect that since our country and our community are constantly growing in population that we would—over the years—have been for more hospital facilities. We have actually provided many more hospital beds. In 1939, for example, there were 349,880 hospital beds in the United States, according to the American Medical Association. Each year the total bed capacity grew until, in 1949, there were reported 413,875 — an increase of over 18 per cent. Into these hospitals in 1939, with 349,880 beds—were admitted 7,144,869 patients—a total of 20.4 per bed. The number of people admitted to hospitals has increased too, significantly. In 1949—10 years later—12,401,188 were admitted—an increase of over 74 per cent.

"Now, how can you have more patients than you have beds? Your physician's new knowledge, your hospitals improved facilities, and new therapeutic discoveries, significantly antibiotics, have accounted for this shortening of the average period of hospitalization. For example, in 1935-36, the incidence of pneumonia was about the same as last year—the difference being that you could count on an average hospital stay of 19.1 days followed by rest at home. The mortality rate for pneumonia in 1935 was about 68 per 100,000. Today, thanks to antibiotics, pneumonia is treated in about half the time or less, and the mortality rate has dropped to 20 or less per 100,000."

Cold and Cough Advertising

A GUIDE for advertising cold and cough preparations has been published by the National Better Business Bureau. The 7,000 word report, based on an exhaustive analysis of nearly 100 FTC cases and which was prepared with the advice of representatives of the A.M.A., the F.D.A. and the Proprietary Association, starts with the following twelve brief statements:

(1) No known preparation may be truthfully advertised as: a. having any effect on the cause or causes of a cold; b. a cure, remedy or effective treatment for colds or coughs; c. affecting the course or duration of a cold or cough.

(2) Terms descriptive of symptoms of serious diseases such as tuberculosis, diphtheria, pneumonia, etc., should be avoided in advertising recommending the use of the preparation for coughs or colds.

(3) The value of rubbing preparations is limited to the relief of symptoms of colds such as the pain and discomfort which may accompany a cold; they should not be advertised as "penetrating" so as to relieve any organic or deep-seated condition.

(4) The value of analgesics is limited to the temporary relief of muscular aches and pains or simple headaches due to a cold.

(5) Antacids should not be advertised as remedies for colds or cold symptoms or as shortening the duration thereof.

(6) Laxatives should not be represented as of value in treating a cold.

(7) Vitamins are not recognized as effective remedies for or preventives of colds or coughs.

(8) The value of cough syrups, drops, lozenges, etc. is limited to the relief of coughs due to colds or minor throat irritations.

(9) The value of nose drops, sprays, inhalants, etc. is limited to the relief of minor types of nasal irritation and congestion and to temporary help in keeping the nose clear; precise or blanket claims as to the area which the medication will reach or cover should be avoided.

(10) Smoking mentholated cigarettes will have no beneficial effect on colds or coughs.

(11) Antihistamines should not be represented to cure or prevent colds or coughs but may be advertised to relieve, check, or, in some cases, stop cold symptoms.

(12) In general, all advertising claims should be limited to the provable effects of a given product on cold or cough symptoms and should be explicit as to the kind of symptomatic relief afforded.

Vitamin Research Grants

EIGHT new grants for research in nutrition, totalling $60,700, became effective January 1, according to Dr. E. Gifford Upjohn, president of the National Vitamin Foundation. These grants are:

Dr. Sophie D. Aberle, University of New Mexico, Albuquerque, $17,500 for study of effect of an improved maternal and infant diet upon infant mortality rate.

Dr. Bacon F. Chew, Johns Hopkins School of Hygiene and Public Health, Baltimore, $5,000 for the study of vitamin B_{12} as a growth factor in man.

Dr. E. W. Crampton, McGill University, McDonald College, Quebec, $1,500 for study of possible adjuvant action of rutin on ascorbic acid utilization by the guinea pig.

Dr. Benjamin M. Kagan, Michael Reese Hospital, Chicago, $7,500 for study of vitamin A metabolism in man in health and disease.

Dr. R. W. Luecke, Michigan State College, East Lansing, $3,000 for further studies of the effects of low intakes of nicotinic acid, pantothenic acid and riboflavin during pregnancy on the health and livability of the newborn pig.

Dr. O. Neal Miller, University of Texas, Medical Branch, Galveston, $10,700 for study of the sprue-like syndrome (folic acid deficiency) in the duckling.

Dr. Richard W. Vilter, University of Cincinnati, College of Medicine, Cincinnati, $6,000 for study of metabolic defects induced by desoxypyridoxine, a pyridoxine antagonist.

Dr. Heinrich Waelsch, New York State Psychiatric Institute, New York, $9,500 for study of biological function of glutamine.

SOCIALIZED MEDICINE IS NO BARGAIN

By William L. Hutcheson

I am against socialized medicine. So is the organization which I have the honor of heading. At the Twenty-sixth General Convention of the United Brotherhood of Carpenters and Joiners of America, held in Cincinnati last September first, 300 delegates, representing over 54 per cent of the total membership, voted down a resolution to support the National Health Program. This probably does not jibe with the feelings of a good deal of the rest of the labor movement because much of the pressure for "free" medical care is coming from labor organizations. But it does reflect my sentiments and the sentiments of our recent convention.

Saving a dollar has never been distasteful to me. In fact I like to get as much for my money as the next man. That is one of the reasons why I oppose socialized medicine. It is no bargain. It looks cheap the way the backers present it, but when you dig down under the fancy layer of propaganda frosting you find that it can be mighty expensive. The British people have already discovered this fact. The July issue of International Labour Office, contains some very interesting data on the operation of the National Health Service in Britain. I quote a few lines of that report:

"The total (gross) cost of the National Health Service in 1948-1949, the first year of operation, greatly exceeded the original estimate. This was 265 million pounds, as against a revised estimate of 368 million pounds, with a net cost to the taxpayer of 278 million pounds. The revised estimate for the year 1949-1950 was 450 million pounds as against an original estimate of 352 million pounds. For the 1950-1951, the cost is estimated at 484 million pounds; in 1946 when the Bill was passed, the service was believed to cost 167 million pounds a year."

In case you don't understand what the International Labour Office is, I can best explain its functions by quoting a bit from its preamble:

"The International Labour Office is an association of nations, financed by Governments and democratically controlled by representatives of Governments, of management and of Labour organizations.

"Its purpose is to promote social justice in all countries of the world. To this end it collects facts about labour and social conditions, formulates minimum international standards, and supervises their national application."

The I.L.O.'s publication, "International Labour Review," is published in the United Kingdom. As an international organization, I.L.O.'s findings are supposed to be strictly impartial.

Getting back to the report; if I read it correctly, service that was supposed to cost 167 million pounds per year when the plan was set up in 1946 costs 484 million pounds per year, and the end is not yet in sight. By my old-fashioned kind of arithmetic that is an increase of better than 345 per cent and I am sure my poor old mother, who always made a dime do the work of a quarter, would not consider that kind of proposition any bargain.

I know! I know! The socialists claim that money is of no consequence in the matter of national health;—getting the poor the same quality and quantity of medical care as the rich can get under private enterprise is the advertised objective of the National Health Program. That sounds fine, too; but on Page 57 of the I.L.O. report, I find the following sentences:

"Survey of the distribution of doctors by boroughs shows that certain wealthier districts (of London) have an average of one doctor for 1,261 patients, while in the inner East End there are 2,472, or twice as many patients, per doctor. For a group of southern boroughs, the average is 2,897."

If that isn't the "one horse and one rabbit" recipe transferred from the meat pie maker's kitchen to the National Health program, then I need new reading glasses. I have tried to figure it from all angles but the answer I always come up with is that the lumbago, shingles and bellyaches of London's South Siders get only half the attention that similar ailments get in the swankier districts. For all the planning that has been done, there is still an uneven distribution of doctors in London. If the backers of the National Health Program are to achieve their objective of equal health protection for all, the next step must be to tell doctors when and where and how they are to practice. Therein lies my greatest fear of socialization.

Socialization and death have one thing in common; you cannot be either a little bit socialized or a little bit dead. It is whole hog or nothing. After two years of the National Health Program, London doctors still have preferences as to where they want to practice. By compulsion of one kind or another, somebody is going to have to shoo doctors away from the fancy neighborhoods into the tenement districts or the program will wind up where it started. When the government is given authority to tell one group or one profession where and how its members are to work, no other group or profession can be safe for long.

If the day ever comes to America when Uncle Sam usurps the power to dictate to doctors under a health plan, it will be a sad day for carpenters. Adequate housing is still an unsolved problem in this country, especially for the poor. If it is logical to nationalize the medical profession to get more medical service for the poor, it is equally logical to nationalize the home construction industry to get roofs over the heads of the lower income groups.

I do not know much about doctors, but I know quite a bit about carpenters. They are an independent lot. They want to work where and how they please. The first bureaucrat who told a carpenter he had to work in Little Rock when he wanted to work in Lancaster would be gumming his food for lack of teeth. Carpenters want to be free agents; free to work where they want to; free to negotiate the terms of their wages and working conditions through collecfive bargaining; Yes, even free to leave the industry and try their luck at something else if the spirit moves them.

They will retain these freedoms only so long as all other groups retain theirs. Socialization is like a wolf with a tapeworm; once it starts gnawing, it never can stop. Socialized medicine would only be the first bite out of our free enterprise system; it would not be many years before the carpenters would be feeling the teeth of socialization on the seats of their overalls. Any way you look at it, socialized medicine is no bargain and the carpenters want none of it.

I know that the backers of the national health plan in this country resent the term "socialized medicine." They have all sorts of arguments to "prove" that doctors and patients will remain free as the air under their program. They make a strong case. Perhaps if

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*Read before a Joint Session of the House of Delegates of the American Medical Association and the Third Annual Conference of the A.M.A. National Education Campaign.

COURTESY OF E. R. SQUIBB & SONS

THE REFILL PROBLEM

FACED with loss to supermarkets and other non-drug outlets of business in many of the staple products for which they have long been practically the sole source of supply, the druggists of this country have, within recent years, been realizing a marked increase of business in the one department in which no one can compete with them, namely the prescription department. The great increase, during the past decade or more, of drugs which are highly efficacious in an increasing number of ailments has resulted in the writing by physicians of sharply higher numbers of prescriptions for pharmaceuticals which are high in price. This condition has tended to increase the gross income of the average drug store even in the face of this loss of business in staple items.

But for two years the druggist has been faced with a possible body blow being delivered to this profitable department of his store. It was at the N.A.R.D. meeting on October 15, 1948 that the Commissioner of Foods and Drugs, Paul B. Dunbar, the top man of the Food and Drug Administration, stated that as he interpreted the Food, Drug, and Cosmetic Act, the pharmacist was prohibited from refilling any prescription unless the prescriber expressly authorized in the prescription that it could be refilled, or unless he later signified in writing that refilling was permissible.

It must be remembered that at that time the Food and Drug Administration was feeling a new surge of power flowing through its veins for it was on January 19 of that year that the U. S. Supreme Court upheld the FDA in the famous Sullivan case, and it was on June 24 of that same year that the Miller amendment to the FDC Act was enacted. The Sullivan case established the right of the Food and Drug Administration to control of misbranding of drugs over the retail counter even though the drugs were involved in in-

trastate commerce after their original movement in interstate commerce. The Miller amendment gave the FDA jurisdiction over any article while it is held for sale following its shipment in interstate commerce. Taken together, the Sullivan decision and the Miller amendment give the Food and Drug Administration just about complete control of retail distribution of drug products as regards adulteration and misbranding. And it is the misbranding phase of the act that gives the FDA control over prescriptions, for exemptions from the labeling requirements of the act are granted in Section 503 (b). Furthermore, Section 502 (d) exempts a prescription containing a named narcotic or hypnotic drug or any derivative from stating the name, quantity, and bearing the warning, "May be Habit Forming," only if the prescription is marked nonrefillable, or if its refilling is prohibited by law. As regards the jurisdiction of the FDA under the Food, Drug and Cosmetic Act in the field of prescriptions, Charles Wesley Dunn, counsel for the American Pharmaceutical Manufacturers' Association, recently stated:

"This law is directed to prohibit the pharmacist from dispensing a prescription-restricted drug, on a non-prescription basis; and it is designed to prevent this dispensing of such a drug, which is dangerous to public health. Hence it cannot be said that this law does not or should not enter the domain of the pharmacist; or that it unduly interferes with his professional relation to the physician or with the latter's professional relation to his patient. On the contrary it is manifestly designed to secure the integrity of each such relation and to assure its due performance."

As is the nature of government agencies, once the Food and Drug Administration realized that it had this power, it set out to let it be known that it had such power and that it intended to use it. However, this announcement to the N.A.R.D. in October 1948, struck terror to the hearts of organized pharmacy since it is generally conceded that at least 40 per cent of the druggists' business in prescriptions is in refills. However, the leaders of pharmacy sat back and waited for the FDA to promulgate a ruling or regulation having to do with the subject of prescription refills, or to bring an action against some druggist concerned with the refilling a prescription which action could be tried in the courts and the extent of the power of the FDA finally judicially determined. However, no such action on the part of the FDA was forthcoming and the threat of action hovered over the pharmacists of the nation.

Finally, organized pharmacy itself became divided in attempting to resolve this impending threat to the most profitable part of the business of the pharmacist. The N. A. R. D. had introduced in Congress the Durham-Humphrey Bill which not only would allow telephone prescriptions to be confirmed in writing within 72 hours, but which authorized the Food and Drug Administration to compile a list of drugs which cannot be sold over the counter and for which prescriptions cannot be refilled. Thus this bill placed in the hands of the Food and Drug Administration the full power to decide which drugs are dangerous to health and cannot be offered for general sale. As the law stands at the present time, the manufacturer is the one who decides whether or not the product should be labeled for sale over the counter, and if he decides wrongly he is subject to immediate seizure action on the part of the FDA. Under the power given to the FDA in the Durham-Humphrey Bill, there would be no chance to try these issues in court since Congress would have given the right of determination to the FDA and the determinations of the FDA would be just about impossible to upset in the courts.

The American Pharmaceutical Association chose not to follow the path pursued by the N. A. R. D., but rather sought to force the Food and Drug Administration to issue a ruling or regulation covering the situation so that the pharmacist would know where he stood. If, after such a regulation was promulgated, pharmacy did not like the regulation they could go to court to try and upset it, and failing in this action, they could then work for an amendment to the law to bring control of prescriptions under the act more in line with their opinion of what it should be. In order to force the FDA to act in the matter, the American Pharmaceutical Association finally engaged legal counsel and demanded a public hearing on the subject. On December 5, Federal Security Administrator Oscar R. Ewing—the FDA is a unit of the Federal Security Administration—denied the application of the A. Ph. A. for a public hearing, but issued a new regulation which is to be substituted for the present regulation applying to Section 502 (f) (1) of the Food, Drug, and Cosmetic Act. Section 1.106 of the present regulations are revoked by the order, and a new Section 1.106 is substituted. No hearing is contemplated on the new regulation, but thirty days are allowed for written comments to be forwarded to the Administrator. Then at a later date a final regulation will be promulgated.

By and large, all that the new regulation does is to permit refilling of prescriptions for preparations that can ordinarily be sold over the counter except in cases where the prescriptions are marked nonrefillable by the doctor, or in cases in which the pharmacist "reasonably should know that the refilling may be harmful to the purchaser." The regulation gives no permission to refill a prescription for a drug which cannot be sold over the counter, and therefore prescriptions for such products would have to bear instructions from the doctor as to the extent of permissible refilling before they could be refilled at all.

Since organized retail pharmacy itself was not in agreement as to the method to be pursued to solve the legal situation surrounding the prescription refill problem, there could be no agreement in the drug industry as a whole as to the most desirable form such a solution should take. Manufacturers therefore stayed out of the controversy until such time as the Durham-

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COSMETICS

COSMETICS in 1951 is a subject which is generally viewed with uncertainty due to the gathering storm in international relations. In letters from leaders in the cosmetic branch of this industry, published this month in BEAUTY FASHION, the difficulty of forecasting the conditions which must be faced during the coming year is a predominant note, and many of them liken such forecasting to gazing into a crystal ball. However, there are many of these leaders who express quite definite views on various factors which will influence the trend of the business in cosmetics during the coming year, and there are many who make sage observations regarding the problems with which the industry will be beset, war or no war.

Increased prices for cosmetics all along the line appear certain as there is general unaminity of opinions on this point. As Eugene Coleman, Jr., vice-president of Colonial Dames puts it:

"Increase of prices is a must. Rising costs of raw materials and containers has made immediate price raises necessary in most lines. This has been taking effect since September and October in the treatment and perfume lines, and if prices of raw materials continue to mount we have not seen the end of price raises as yet."

However, this apparent certainty of higher prices for cosmetics right down the line does not auger well for high dollar volume in this industry, and thus the higher priced lines might suffer in the opinon of Ralph Lewis, president of Harrier Hubbard Ayer, who says:

"The reduction in take-home pay due to higher taxes leaves the average person little of her 'fun money' to spend on extras and so she is cautiously buying instead of indulging in her wants. . . . Increased cosmetic prices together with the twenty per cent sales tax gives our sales potential a somewhat lagging note . . . and might turn noses toward lower priced cosmetics."

The question of shortages of raw materials and packaging materials appears very real to all cosmetic manufacturers as the result of the defense program. Facing this condition, Dr. Walter Langer, president of Parfums Evyan, says:

"As much as I dislike it, I believe that government control is unavoidable. Self-imposed restrictions will not operate for the simple reason that the manufacturers themselves will try to circumvent them.

"Developments of new products will be extensively influenced by shortages and restrictions. New 'substitute articles' will appear as soon as raw materials become scarce and present stocks of finished goods have been reduced below normal.

" 'Substitute articles' should be marketed cautiously to prevent unnecessary inventories when the emergency has passed. Long-range planning should be avoided

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as it will aggravate shortages and delays. Emphasis should be placed on perfumes rather than colognes to reduce the consumption of alcohol. . . . Expansions should be kept at a minimum to reduce problems when business returns to normal."

Ralph Lewis also comments on this phase of the anticipated alcohol shortage as follows:

"In the matter of colognes which have a high alcoholic content generally we might roll over to cream colognes again or to solid fragrances. The future is challenging rather than bleak."

Philip C. Smith, president of Yardley of London, views the problems facing the industry as follows:

"In our opinion the most significant problems are the relatively short-term ones of costs and material shortages. The long-term question of changes in consumer attitude toward the use of fragrances and the changes in the retail pattern, arising from supermarkets, door-to-door sales, etc., are in our opinion less likely to trouble us so long as material shortages and cost squeeze make toilet articles more eagerly sought after. . . . The trend that we consider most likely to bring eventual headaches to the industry as a whole is that of the continuing multiplication of cosmetic products not only by the industry as a whole, but more particularly by individual members of it. It would seem unreasonable that any manufacturer can be an expert simultaneously in all fields, and it seems to us that when any manufacturer attempts this, it is only a matter of time before the public realizes the fallacy."

Regarding the situation in essential oils, Benson Storfer, president, Parfums Corday, states:

"On my recent trip to Paris, I found the essential market in a hectic condition. Not only were prices increased tremendously but it was even impossible to obtain delivery of wanted basic materials, especially those emanating from the Far East. As a result, French perfumes are bound to be higher except in a very few instances.

A basic industry problem is to convert millions of women of all income levels to the daily use of fragrance as an important part of one's make-up, says Jack I. Poses, president D'Orsay Sales Co., who adds:

"Proper and adequate training of sales personnel in perfume departments is vitally important in carrying on this mass conversion, but is usually sadly lacking, even in our finest stores. How to overcome this deficiency . . . how to enlist the help of the store executives in this direction and win their support for special training of toiletries personnel, is another problem for the industry to solve.

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PRESSURE PROPELLED DRUGS

By H. R. Shepherd

Connecticut Chemical Research Corporation
Bridgeport, Connecticut

WHILE the pressure propelled method of packaging received its impetus from the use for insecticides during World War II, and while its development in the cosmetic and household specialty field has recently been very marked, its application to drugs and pharmaceuticals has lagged. This is in spite of the fact that doctors and dentists have for many years used a pressure propelled product for local anesthesia. In view of the dangerous state of world affairs and the intense rearmament now getting under way, this type of packaging will most likely take on a new significance for many types of drug preparations.

The layman today fully appreciates the fact that he lives in an atomic age, but although he doesn't verbalize as much about it and the newspapers don't constantly confront him with it—except in the form of advertisements—the layman today, whether he outwardly realizes it, lives in an age of packaging which he accepts enthusiastically and with phenomenal adaptability. Modern packaging techniques have given us such nebulous things as time and space and have given us commodities which produce new and better end results in the field of packaging.

As a result of these techniques and commodities, an exciting field has been reopened after lying relatively dormant for a half century when its early developers first introduced its particular application.[1,2] The field referred to and the field which has had its fantastic growth primarily stimulated by its World War II use is that variously known as Aerosol, Pressure Propelled Packages, and Packaged Power. Although the impetus needed to establish this type of packaging was born of its insecticidal applications, the early application of this method of packaging was in the field of drugs and pharmaceuticals.[2] It is the purpose of this paper to briefly review this type of packaging since more extensive discussions of specifics are covered by other workers.[3,4,5,6,7] Despite the early applications in the drug

and pharmaceutical field, the utilization of this principle in this field is currently in the throes of some extraordinary developments.

Pressure Propelled Products are logically broken down into three categories:

1) Aerosol Type; 2) Surfasol Type, and 3) Aerated or Foam Type.

1) *Aerosol Type:* By definition, an aerosol is a colloidal system consisting of very fine sub-divided liquid or solid particles dispersed in, and surrounded by, a gas.[7,8,9] A common example—fog, where liquid particles are dispersed in the gas phase and smoke, where solid particles are dispersed in the gas phase.

Aerosol may be classified in three categories—this classification being based on the method of producing aerosols:

a) Thermal Aerosol—the aerosol being produced by the volatilization of a liquid in contact with a surface at an elevated temperature; the rate of volatilization and the particle size of the aerosol produced depending on the boiling point of the material and the temperature of the source of heat. A common example of such an aerosol is demonstrated by the use of cold relief vaporizers in which tincture of benzoin and similar medicants are dispersed using water in the form of steam.

Outside the field of pharmaceuticals itself, the application of thermal fogs for the control of insects out-of-doors and the generation of smoke for military purposes is also to be noted.

b) Mechanical Aerosol—in which the colloidal particles are produced by specifically designed nozzles which result in the actual shearing and breaking up of the liquid particles by these specifically designed apparatus. In this particular application extensive use was made of Venturi nozzles.

There are a large number of applications where the Mechanical method is used. Of particular interest to us is the use of this method in the field of pharmaceuticals which has been extensively dealt with in the last five years in the development of the new field of aerosol therapy—these aerosols being developed in all three methods.[10]

c) Dynamic Method—of the production of aerosols, either by use of liquified or compressed gases, or a combination thereof. Here a combination of gases and nozzles produce—by the use of a small compact package—the desired spray pattern. There have been a number of pharmaceuticals made commercially available recently using this method, particularly in the field of respiratory relief.[11]

Aerosols, regardless of the method by which these colloidals are produced, have been given their acceptance by the medical profession primarily because of the effectiveness with which these minute particles are able to produce therapeutic results. One worker[12] listed a number of advantages of the portable type atomizer in treating respiratory infection. He mentions the following in the use of aerosol penicillin particularly as it relates to the method of application:

"The absence of dangers due to untrained personnel using the intramuscular route of administration.

"The ease of transporting and caring for the materials, the atomizer and penicillin. In winter when respiratory infections are most prevalent, it is also easiest to take the proper care of penicillin.

"Painless administration. This is an important factor in nervous or young patients. The screams of one child treated intramuscularly still ring in my ears, in contrast to which most children take the use of aerosol penicillin as a game.

"The saving in penicillin. In this series of cases, small amounts of penicillin were used for two important reasons: first, because penicillin was scarce and, second, because small doses were sufficient. One case of typical moderate pneumonia was treated with a total of only 160,000 units of penicillin in 4 days, in contrast to the usual intramuscular dose of 160,000 units a day.

"Prophylactic use. One hesitates to use a valuable drug which is relatively scarce as well as relatively expensive in large doses unless confronted with a seriously ill patient. Also, one hesitates to make a pin cushion of a patient unless it becomes necessary. With the efficient painless use of penicillin as a spray these objections are removed, and one is more inclined to use this drug aginst respiratory infections in their early stages.

"Local comfort (rather than discomfort). The use of penicillin spray has a remarkably soothing local effect in addition to its therapeutic effectiveness. Dry, irritated mucous membranes are moistened, relieving the soreness of the throat as well as the tracheal discomfort and burning. The effect on a tight, frequently recurring cough is dramatic; it rapidly becomes much less frequent and less painful and expectoration is made easy.

"The absorption of inhaled penicillin. The fact that inhaled penicillin spray is absorbed and can attain an effective level in the blood suggests that perhaps sites of infection other than those in the respiratory tract may be treated in this manner."

The above, although dealing primarily with the tratment of respiratory conditions using penicillin, highlight the importance of this method. Many other researchers in this field are enthusiastically making daily advances in using aerosol therapy.[13,14,15,16]

Research is being directed not only in the direction of the therapeutic advantages of these colloidal particles but toward the development of compact packages which are simple to operate and low in cost in order that the beneficial therapeutic effects already known in connection with aerosols can be made more generally available.

With the achievement of greater success, it appears that the Dynamic method, using liquefied or compressed gases, offers tremendous opportunities in an endeavor to accomplish these results for the pharmaceutical, drug, and medical professions.

2) *Surfasol Type:* It was mentioned earlier that

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CROSS ROADS FOR THE DRUGGIST

By Frazer V. Sinclair

MANY druggists have a real reason to be disturbed. It looks as if they are at the wrong end of a trend for some of the traditional products they sell. The increasing percentage of retail sales of toilet articles by self-service super-markets is the clearest visible evidence of what is happening and the nearest, immediate problem.

But the super-market, dynamic in its growth and so predominant in everyone's mind, is not the problem for the druggist. It is rather the most obvious and the most threatening aspect of the problem.

The industrial revolution that has brought so many social changes for the past few generations has at last caught up with the retail trade. We don't know that the super-market is the last or the best expression of the changes in mechanization and other ways that this revolution will bring. It may be the vending machine.

Theorists can give many reasons to explain the expanding success of self-service and the grocery super-market, not only in its own field but as it grows and encroaches on other retail fields. It is enough to say that people like it.

But one contributing influence has not had the attention it deserves, from the viewpoint of the druggist. That influence is consumer advertising.

There are today in our industry many branded packaged products which have been built through many years of heavy, consistent advertising to a point where they are simple utilities. The trade-mark and the package represent a known, accepted need to a substantial part of the public. The achievement of this status by a branded packaged product gives to that product what advertising men call, with relish, a consumer franchise.

We have just about arrived at the point where we may as well admit that such a product requires no personal selling at the retail counter. We may even have to admit later that personal selling impedes its sale, because no salesman can peer into the mind of a customer and sort out all kinds of delayed or subconscious wants, whereas open display and self-service automatically brings many of these wants to conscious action.

The question which will harass many druggists in the near future is this: Should I fight the super-markets on their grounds, or should I fight them on mine?

The super-markets' own grounds will prove tough country for most druggists to occupy. Because of their basic position in foodstuffs, super-markets variously have from five to six women enter their store for each one who enters a drugstore. Or, to put it another way, for each visit a woman makes to a drugstore, she makes four or five visits to a grocery super-market. In overhead the super-market has an enviable advantage over even the very successful drugstore. Such things as rent and labor in their cost relation to sales volume greatly favor the super-market. This is pretty conclusive arithmetic in retail language. It ought to be enough to convince many druggists that the answer to super-market competition is not super-market imitation.

On his own ground the druggist has several advantages that the super-market may well envy. In fact, efforts of some few super-markets to develop full drug departments and the willingness of a super-market chain to join in an unnatural marriage one of their stores with the store of a well-known drug chain is clear evidence of this.

The chief advantage of the druggist over the super-market, house-to-house saleswomen, the vending machine or wherever this age may carry us, is of course, his professional reputation. The professional reputation of the druggist has lost a great deal of its traditional importance in selling over the last twenty five years. Step by step the druggists has been forced by rising costs to sell goods which could not, by any measure, be associated with or need a professional reputation. In addition, the druggist who has believed that the end of the rainbow lay somewhere in the vicinity of "consumer demand" and who so repeatedly advised salesmen, "You create a demand for your product and then come back and I'll buy it," now finds that some one else can do a better, cheaper, bigger volume with this "demand."

The druggist's costs are still rising and are now a more critical factor in his continued existence than they ever were. He can't afford to lose this volume; very likely he can't afford to hold it. What can he do?

He is still "Doc" in his community or he should be. The progress of medicine, particularly in the last ten years, has immeasurably strengthened his position. Because he is still the "chemist" of his neighborhood, he is in a position to advise and counsel in several specialized fields, not too far removed from medicine and pharmacy in chemical associations. He can't do this on low-priced, utility products where mass advertising has made up the consumer's mind, where personal selling and reputation command a low premium.

Take perfumes, cosmetics and toiletries as one example of a specialized department preeminently belonging in a drugstore. These products, as a general class, now have wide distribution. They are sold in department and specialty stores, in chain and independent drugstores, in variety (5 and 10) stores and grocery super-markets, in many general stores, some beauty parlors, by house-to-house agents and a little by mail. Over 150,000 retail stores carry these products, over 170,000 house-to-house agents sell them. Quite a division for only 800 million dollar retail sales, or 500 million of taxable perfumes and cosmetics!

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BLACK STAR PHOTO

CHLOROPHYLL AS A DEODORANT

By Milton A. Lesser

THE March 15, 1950 issue of the *New York State Journal of Medicine* carried an article which—to say the least—aroused considerable interest. This report by Westcott[1] discussed the potentialities of oral chlorophyll fractions for body and breath deodorization. Almost immediately, people in the industry began to ask questions and, more important, began to produce and market chlorophyll preparations. Indeed, the situation is now such that the question has been asked[2] editorially, "Will chlorophyll deodorants be the antihistamines of 1950-1951?"

For several years there has been a growing realization that chlorophyll has deodorizing effects. It will be recalled that, back in 1943, a new wick type of air conditioner, based on the use of chlorophyll,[3] was placed on the market. This, air "freshener" still enjoys considerable popularity. Subsequently, in studies[4] on the therapeutic applications of nature's green substance, it was found that chlorophyll is efficient as a deodorizing agent for foul-smelling suppurating wounds. In 1949, Rapp[5] showed that a chlorphyll-containing dentifrice caused a considerable reduction in mouth odors. The newest developments point to its utility for deodorizing both the body and the breath.

Chlorophyll has, of course, long been used as a coloring agent in foods, drugs, cosmetics and soaps. During the last decade or so it has also found a place in medicine as a healing aid and bacteriostatic agent.[4,6,7] Work to extend the value of chlorophyll as a therapeutic substance has continued and it was during such a study

that its action on body and breath odors was observed.

Such studies, as well as the extensive investigations of biochemists and plant physiologists, have provided considerable knowledge concerning the structure of chlorophyll. As remarked by Smith,[8] it is known that chlorophyll, the green coloring matter of plants, consists of two components, namely: Chlorophyll *a* (C_{55} H_{72} O_5 N_4 Mg) and chlorophyll *b* (C_{55} H_{70} O_6 N_4 Mg). These components are present in an almost invariable proportion of 2.9: 1. Both are relatively inert blue-black substances with a marked metallic luster. They have no definite melting points; varying from 117° to 120°C. for the *a* form and 120° to 130° for the *b* form. The two fractions are neutral in reaction, with neither acidic nor basic properties.

A number of chlorophyll preparations are available commercially. For convenience, however, they are generally described as either oil-soluble or water-soluble chlorophylls. The older clinical studies have been concerned mainly with the oil-soluble material. Methods for making ointments containing oil-soluble chlorophyll for stimulating wound healing have been described in patent specifications.[9]

However, most of the new work, including that on the use of chlorophyll as a breath and body deodorant, has been based on the water-soluble derivatives. Experience has shown that the water-soluble forms are as effective as, if not superior to, the oil-soluble form. At the same time they are bland and nonirritating.

A number of water-soluble derivatives have been used clinically and, no doubt, others are being investigated. Smith,[8] for example, used a saponified metal complex derivative of chlorophyll, such as sodium copper chlorophyllin. In his extensive review of the therapeutic applications of chlorophyll, Gruskin[4] cited not only the use of this compound, but of sodium magnesium chlorophyllin and sodium iron chlorophyllin as well. More recently, Westcott[1] employed "specially prepared chlorophyllins," of as yet undisclosed composition, in his deodorization studies.

Considering the number of preparations in use, Grill[10] has stressed that anyone working with chlorophyll must state specifically what forms were used so that results may be reproduced. He also notes that newer methods of separating the pigment offer means of providing pure compounds or derivatives.

A number of methods are available for extracting chlorophyll from fresh or dried green leaves or plants. Nettles and spinach are rich sources, but alfalfa is commonly used in commercial methods. In discussing several procedures for extracting chlorophyll, Aries[11] pointed out that the pigment molecule is very sensitive to the action of many reagents. Hence, in many cases, the substances isolated are mixtures of various chlorophyll derivatives.

Acetone has long been used to extract chlorophyll,[8,12] but other solvents are employed for this purpose. This is the case in the efficient chromatographic adsorption methods which offer convenient and rapid means of obtaining chlorophyll in a pure state.[10] Details on the commercial chromatographic production of chlorophyll are provided in the comprehensive report of Shearon and Gee.[13] They also provide information on the preparation of a number of different chlorophyll compounds, including the water-soluble chlorophyllins. Methods for making other specialized soluble chlorophyll compounds have been patented.[14]

Although it would hardly seem necessary to question the wholesomeness and safety of chlorophyll, the physiologists and pharmacologists have taken no chances. For example, Smith[8] found no toxic effects when the water-soluble derivatives under his investigation were administered by mouth or parenterally. Thus, a 2 per cent chlorophyll solution was given daily for three days by mouth to a normal healthy adult male volunteer. No symptoms or signs occurred other than a slight increase in bowel evacuation; the stool being somewhat softer than usual and a little discolored by the chlorophyll. Gruskin[4] similarly noted that chlorophyll is nontoxic and that it may be introduced intravenously or taken orally in relatively large amounts without harm to the individual.

His report, published over a decade ago called attention to the potent deodorizing action of chlorophyll on wounds. In anaerobic infections, for instance, the lesions are usually foul smelling. Almost invariably, however, this odor disappears after a few applications of a chlorophyll preparation. He also cited the observation that, in cases of ulcerative carcinoma where a great deal of putrefaction is associated with foul odor, the use of chlorophyll tends to clear up this odor rather promptly. Irrigation of abscess cavities with chlorophyll solutions caused prompt disappearance of odor and marked reduction in the suppuration.

Others[12] have also reported on this deodorizing property of chlorophyll in the treatment of malodorous lesions. Particularly indicative is the statement made a few years ago by Bowers[15] of the Army Medical Corps. "Chlorophyll was first used," he reports, "at Winter General Hospital in a group of compound fracture cases with osteomyelitis and widely open

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BLACK STAR PHOTO

SUBSTITUTIONS IN COSMETICS

By Harry Hilfer

CHEMISTS in the cosmetic industry are again faced with a problem arising as a result of a shift of the national economy to a war-time basis. Many of us have been through a similar period in the not too distant past in which substitutions had to be made for materials allocated to military usage and therefore not procurable for the usual cosmetic purposes. The experience gained in the past will, therefore, make a second transition, if necessary, somewhat easier even if it is undsirable.

The full effect of military buying has not reached the optimum at the present time, and we all hope that it never does. Recommendations being made in this article are based on experience gained in World War II and no assurance can be made that similar conditions will obtain in the immediate future. Some of the materials used as substitutes in the past have been retained. Additional study of their characteristics have caused them to find further usage in other fields and they may be in greater demand for military usage than was true in the past. Any recommendations made will therefore be subject to these new conditions.

Glycerine was among the first commodities to become difficult to obtain and at this time seems to be following its past history. A mitigating factor lies in the production of synthetic glycerine, which may make its procurement a bit easier, but it does not appear that production facilities for synthetic glycerine will be great enough to supply both future military and civilian needs. In most cases propylene glycol was used as a substitute with good success. There are some differences in the behaviour of propylene glycol as compared with glycerine for which compensations must be made in the formulations. This is particularly true in hand lotions, since the addition of one or the other has a tendency to cause a difference in the viscosity of the final product. This difference does not materially effect a substitution in creams of the vanishing cream type. Propylene glycol, used as a substitute for glycerine in products used orally, such as dental pastes, has been found to be unsuitable because of its characteristic after-taste. Actually I do not believe that there is any completely satisfactory substitute for glycerine in a dental paste.

Propylene glycol may also be used as a glycerine substitute in any of the many alcoholic preparations in which glycerine is ordinarily used. These products would include after-shave lotions, astringent lotions and, in many cases, colognes. The film after evaporation may not be as unctuous as is the glycerine film, but this may be compensated for by increasing the concentration. Propylene glycol's freezing point depressing characteristics are as good, indeed, somewhat better than are glycerine's. In addition, propylene glycol has bacteriostatic properties not possessed by glycerine.

Certain preparations are heated over extended periods during their manufacture. Propylene glycol is subject to an appreciable evaporation rate at elevated temperatures, since its boiling point is approximately 100°C. lower than glycerine's, and its vapor pressure also is higher. Suitable compensations should therefore be made for any evaporation which would take place.

As a result of a glycerine shortage, procurement of some raw materials dependent upon glycerine also would become difficult. One large class of compounds in this category are the various monoglycerides which have gained a prominent position as emulsifiers. Since their advent, other emulsifiers have appeared which may be used as replacements. In no case, however, could the substitutes be used without compensating for the difference in physical and colloidal characteristics. Propylene glycol stearate causes the emulsion to be softer by comparison as do most of the polyglycol stearates. Sorbitol esters of stearic acid also do not exactly duplicate the function of glyceryl mono stearate. In using one or another material as a substitute, it is also difficult to formulate a rule which could be successfully followed for all preparations. The use of a substitute must therefore depend upon the desired characteristics of the final preparation. One of the principal uses for glyceryl mono stearate has been in deodorant anti-perspirant creams. The concentration usually used in the creams could be cut down materially by the introduction of a quaternary ammonium salt emulsifier in conjunction with stearic acid in the formulation. Such a procedure is responsible for the lowering of the pH, but this can be corrected by an appropriate addition of a buffer.

One of the most commonly used materials affected by the military needs is ethyl alcohol, since it has so many uses both as a solvent and an intermediate in organic synthesis. The additional supply afforded by the production of synthetic ethanol did not help the shortage in World War II materially. Primarily affected were perfumes, colognes, after-shave lotions and a host of other products which depended on alcohol in fairly large concentrations as part of the formulas. To a lesser degree, products such as hand lotions, which utilized alcohol as an aid to faster drying and as a freezing point depressant, were also affected. The alcohol shortage, I feel, was directly responsible for the appearance on the market of the emulsified hair dressings, which still occupy a prominent position. Isopropyl alcohol, which was more readily available, was substituted, but with indifferent success because of its characteristic odor. In many cases, such as in the emulsions, it was completely eliminated or its concentration lowered to almost the disappearing point. Hydrophyllic agents, principally the polyhydroxylated sorbitan mono laurates were used as dispersants for essential oils. These agencies are capable of forming dispersions of the internal phase in water, in which the colloidal size of the particles are so far reduced that they no longer reflect light in the manner of the more easily recognized emulsion, but cause the finished product to appear as clear as a solution. Colognes, particularly, were treated in this manner so that the alcoholic concentration could be greatly reduced. Emulsion preparations in which the essential oils were emulsified in water and which looked much as the hand lotions also appeared on the market and were somewhat successful. That this resort was only temporary could be proven by their almost complete disappearance when alcohol once more became available.

Since the end of the last war there has been an increasing demand for hair preparations. Shampoos, particularly those made from sulfonated or sulfated compounds, are particularly good sales producers. The sulfated materials were not in as great demand before World War II, but they became almost impossible to procure. The easiest substitution that could be made would be a return to the use of soaps as the cleansing agents. Soap is still a good cleanser, but suffers by comparison because it does not behave well in hard waters. There have appeared since that time, and in commercial quantities, different types of sequestering agents which make the soaps effective in hard water. The principal agencies now being used as water softeners are the polyphosphates. They have a tendency, however, to hydrolyze when in water for too long a period of time, and compounds such as the ethylene diamine

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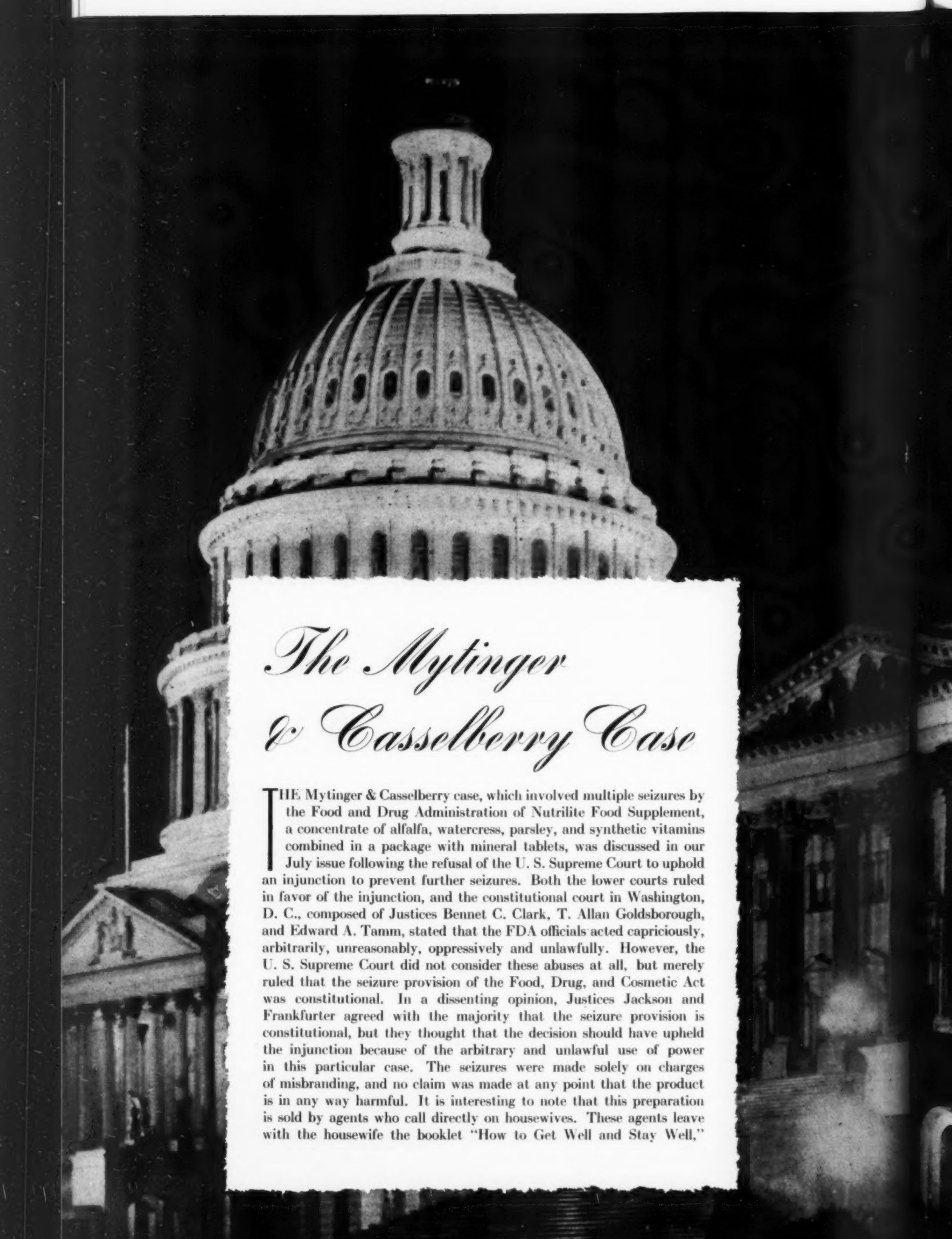

The Mytinger & Casselberry Case

THE Mytinger & Casselberry case, which involved multiple seizures by the Food and Drug Administration of Nutrilite Food Supplement, a concentrate of alfalfa, watercress, parsley, and synthetic vitamins combined in a package with mineral tablets, was discussed in our July issue following the refusal of the U. S. Supreme Court to uphold an injunction to prevent further seizures. Both the lower courts ruled in favor of the injunction, and the constitutional court in Washington, D. C., composed of Justices Bennet C. Clark, T. Allan Goldsborough, and Edward A. Tamm, stated that the FDA officials acted capriciously, arbitrarily, unreasonably, oppressively and unlawfully. However, the U. S. Supreme Court did not consider these abuses at all, but merely ruled that the seizure provision of the Food, Drug, and Cosmetic Act was constitutional. In a dissenting opinion, Justices Jackson and Frankfurter agreed with the majority that the seizure provision is constitutional, but they thought that the decision should have upheld the injunction because of the arbitrary and unlawful use of power in this particular case. The seizures were made solely on charges of misbranding, and no claim was made at any point that the product is in any way harmful. It is interesting to note that this preparation is sold by agents who call directly on housewives. These agents leave with the housewife the booklet "How to Get Well and Stay Well,"

which constitutes the basis of the misbranding charge. The housewife is asked to read this booklet, and then the agent calls at a later date to effect a sale of the product. If the housewife has not read the booklet, the agent generally decides that this particular person is not a good prospect for the purchase of Nutrilite.

Following the publication of the article in our July issue—which was written by James B. Goding, recently resigned as Senior Attorney and Hearing Examiner for the Food and Drug Administration, who at the time the article was written had entered private law practice—we received a letter regarding the article from Lester L. Lev, counsel for Mytinger & Casselberry. We submitted this letter to Mr. Goding, and then published it with an answer from Mr. Goding in our October issue.

Mr. Lev has written us and states:

"Frankly, I thoroughly understand Mr. Goding's resentment at being charged with making misstatements, even though inadvertent, when the charge was, to use his words, 'unaccompanied by a bill of particulars.' Of course my letter did not carry a 'bill of particulars.' It is obvious from a mere reading of it that it was not intended as an answer to Mr. Goding's article but only as a brief request that you print such an answer from the viewpoint of one whose background is not flavored with years of FDA enforcement experience. I shall now attempt to eliminate Mr. Goding's resentment by furnishing him with the 'bill of particulars' he requests. The numbers are references to the pages of the transcript of the trial.

"The article stated that the booklet which was the basis for the seizure actions sought to be enjoined in the Mytinger & Casselberry case was one containing claims of therapeutic value 'in a long and highly varied list of conditions.' The author then lists some of the conditions appearing in the book, saying that they were recited in the Supreme Court opinion. As a matter of fact, the booklet described by Mr. Goding was not the subject of *any* of the libel actions, nor of the injunction case brought by Mytinger & Casselberry against FDA. The record plainly shows, and surely everyone in FDA knows that the only booklets involved in the seizure and the Mytinger & Casselberry cases were three later and drastically revised editions. This fact is equally clear from the Supreme Court opinion itself, which states that the booklet described by Mr. Goding was 'a version of the booklet in use in 1947***,' and that it was revised prior to the filing of an indictment based upon it. The indictment preceded the filing of any of the seizure actions. The opinion also points out that as to the first of the three versions of the booklets actually involved in the Mytinger & Casselberry case, 'Direct curative claims were eliminated,' but that it contained case histories. The opinion then goes on to state that the second pamphlet omitted those case histories and that 'The pages which remained pointed to the dangers and prevalence of illness, described the discovery of Nutrilite, and recommended the booklet to those who wanted to get well and stay well.' The third edition is described in the opinion merely as containing six pages in addition to the second version.

Finding 11 of the Three-Judge Court described the subject matter of the actions as follows:

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THE PILOT PLANT*

By P. C. Wiseman

THE reasons for a Pilot Plant in drug and cosmetic development are well known. They include testing laboratory formulas on production type equipment, testing equipment suitability for the product in question, and producing materials for laboratory and clinical testing.

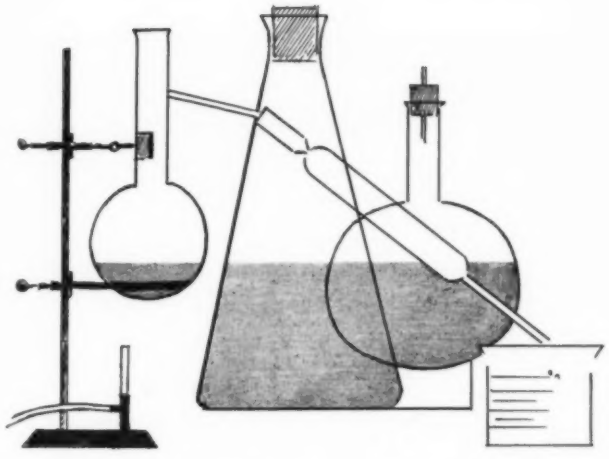
In this paper I will attempt to explain a typical installation, its construction, size, applications and other general features which should be considered.

It is quite easily seen that the selection of desirable or needed equipment will vary widely from plant to plant. This is because of type of production, product produced, and particularly, existing production equipment in the plant. Since the Pilot Plant size equipment usually is disproportionate in cost to production equipment, it becomes an expensive proposition to install and equip such a unit. It is necessary in the interest of economy therefore, to screen such purchases rather carefully. The equipment purchased should be of such nature that it will be usable and used. Equipment purchased just to have it available in case it might be used, means that such units may become obsolete before a use for them is found. Such conditions require replacement at an added cost.

The first step, therefore, is to survey existing plant equipment and products, and have the Pilot Plant parallel such installations. Additions to the basic units can be made as required by changes in plant equipment and new products requiring some special machine.

The question of the size of the equipment for Pilot Plant work is always difficult to answer. Many units for small production are available only in one size, which makes it simple to select. In some cases, several small sizes are available and here, the size selected, should be in line with the size batches expected to be produced. Too large equipment makes the handling of small batches impractical, while too small equipment makes a tedious and time-consuming chore to produce several small batches when a fairly large quantity of the product is required for testing purposes. In some cases, it may be advisable to have available two units of different sizes, a small unit for preliminary testing and a larger unit for larger production.

During recent years, equipment manufacturers have been making available various units in a range of fabrication materials. This enables the purchaser to select the material best suited to his particular requirements. It is generally best to select stainless steel as



the fabricating material where a wide variety of products are expected to be handled. Monel may be used, but there are instances where it may be slightly reactive. Brass, copper, and iron equipment should be definitely avoided for general purposes, although they may have specific applications.

In addition to the mechanical processing equipment, there is considerable small equipment which should be available. Small tanks and pots for mixing and heating, glassware for measuring, mixing, heating and observation are examples of containers. Small tanks or stock pots can be obtained of stainless steel, while the ordinary kitchen pot with good enamel is frequently found to be a very handy and acceptable utensil. Glassware should include graduates, pipettes, beakers of various sizes and of course, flasks of various sizes.

Stirrers and paddles of various types are necessary. Mechanical stirrers should be available in various sizes and capacities. One should be available with a large blade to handle quantities of at least 5 gallons. All such mechanical stirrers should be variable speed and the blades and shaft be of stainless steel. Several paddles made of hard wood are frequently of value for hand mixing, where mechanical mixers cannot be used.

Small pumps for transferring liquids from one place to another will be found quite handy. When we consider balances and scales, we find a wide variety available and several are required. In general, a torsion balance sensitive to 0.01 grams should be available for small weighings. A larger scale of a capacity from 1 gram to about 25 pounds is required and then a large scale to 250 pounds for heavier weighings should be available. The latter, the large scale, can usually be borrowed from the plant when necessary.

The location of the Pilot Plant always presents certain difficulties. It should be as close to the Research Laboratory as possible, so that the equipment will be available and handy for product processing when needed. It must be located, however, with mind for the various services as steam, hot and cold water, air, gas, vacuum, and electric services, both 110 and 220 volt lines. An outside wall should be available for a hood vent, to take care of fumes, vapors and dust, thus minimizing duct work.

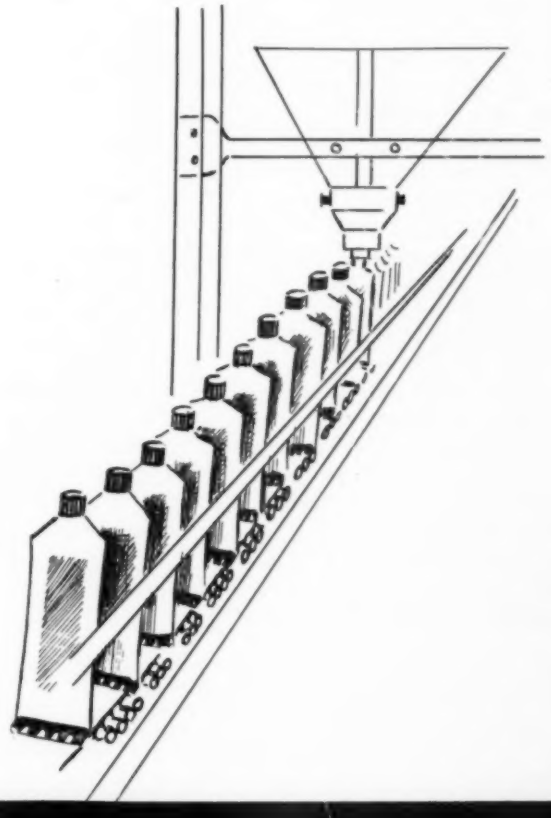
*Presented before the Scientific Section of The Toilet Goods Association December 6, 1950.

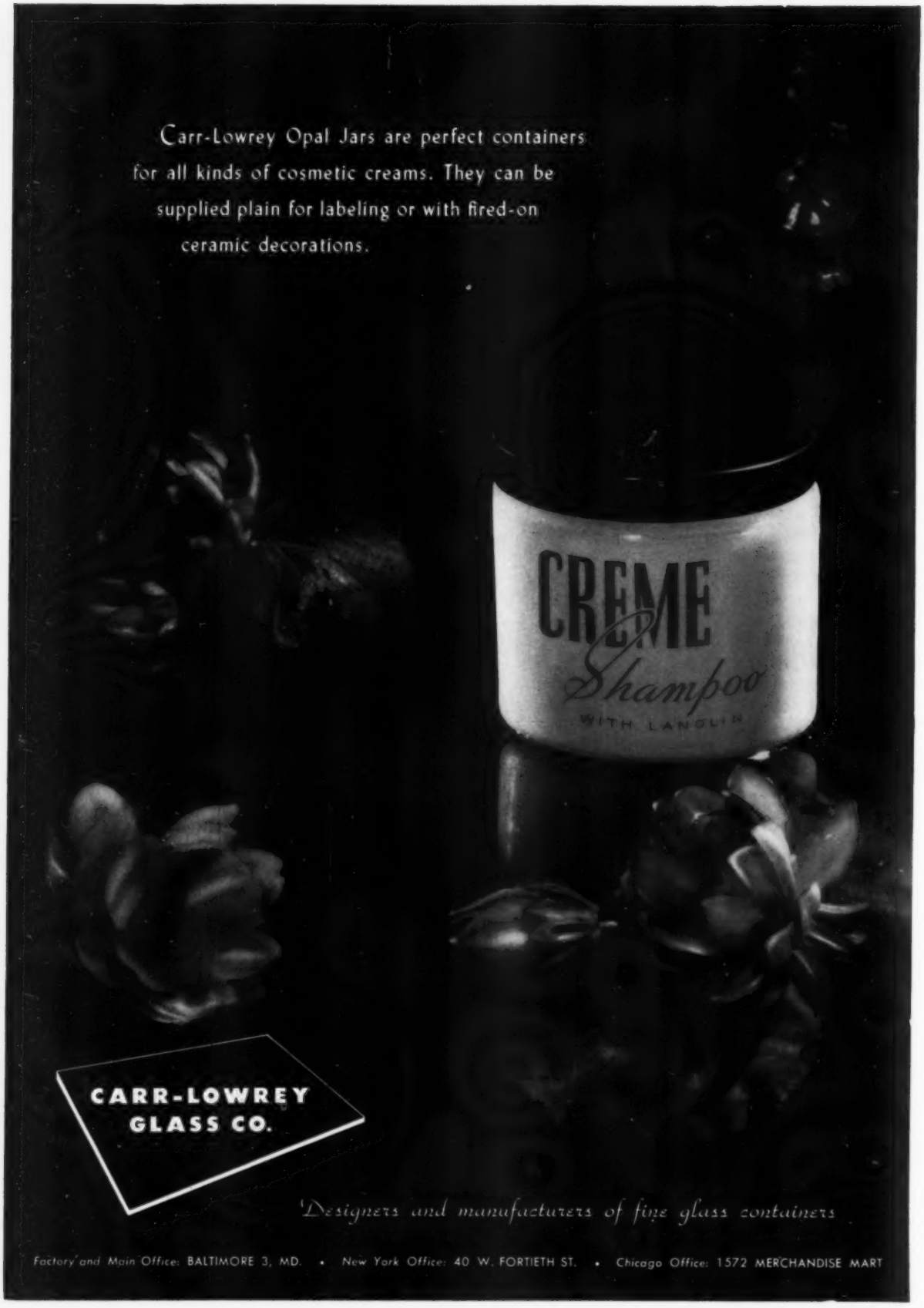
The physical design of a Pilot Plant can take many forms. Low benches with wood tops are perhaps most versatile. A low bench makes equipment more easily accessible for use as well as cleaning. A wooden table top makes it easier for equipment shifting from one place to another without permanent damage to the table top. A cement floor is advisable and it should be fitted with drains and troughs for ease of cleaning. Tile walls for ease of cleaning and for minimum damage in case of spillage and splash from various materials could be considered as advisable. One piece of furniture or equipment frequently overlooked is a large, low sink or wash rack. This should be large enough to take comfortably the largest pot, pan, or tank, and it should be low enough to permit comfortable handling of these large units.

In general, Pilot Plant operations can be conducted in the open. Grinding mills, steam baths and operations involving free steam should be under a hood. This precaution will protect the rest of the laboratory and equipment from fumes, steam and dust, and provide better conditions for the operators.

In 1938, we installed a new laboratory location in The Norwich Pharmacal Company. As a part of this change, there was included a pharmaceutical compounding Pilot Plant. This unit has been in almost constant use ever since, with some additions, and only one deletion. The installation has proved extremely valuable in our new product development and in providing manufacturing data. As previously stated, every laboratory must design its own Pilot Plant. It may be of interest to learn how we at Norwich have made our installation.

(Continued on page 126)




Carr-Lowrey Opal Jars are perfect containers for all kinds of cosmetic creams. They can be supplied plain for labeling or with fired-on ceramic decorations.
CREME
Shampoo
WITH LANOLIN
CARR-LOWREY GLASS CO.
Designers and manufacturers of fine glass containers
Factory and Main Office: BALTIMORE 3, MD. • New York Office: 40 W. FORTIETH ST. • Chicago Office: 1572 MERCHANDISE MART

PACKAGING AND SELLING

BULLS-EYE TIMING

As an example of just about perfect timing, take a look at the new one million dollar national advertising campaign which McKesson & Robbins is sponsoring in cooperation with leading manufacturers. We say perfect timing because this is just about the time that the average drug store is awakening to the fact that something very unpleasant has started happening to him in the growing competition that he is getting from the grocery super-market.

This one million dollar advertising campaign will be spearheaded by 26 full page, two color advertisments in Life and is keyed to directing the consumer to the drug store rather than the super-market for the products of 24 cooperating manufacturers. Because the druggist is arriving at the point where he is well aware that he is facing what is probably the toughest competition in the history of drug store retailing, and since he has been looking for help and leadership of this sort, it seems almost a foregone conclusion that a very high percentage of them will participate in an active way in this powerful advertising campaign.

From the viewpoint of McKesson & Robbins and the 72 wholesale divisions of this company, this advertising campaign looks like a scoop of the first magnitude. This large national wholesaler is participating in one of the largest advertising campaigns of this year in the entire drug trade. It may be assumed from the usual course which cooperative advertising normally takes that the manufacturers who participate are paying a very healthy part of the expenses of this campaign.

But even more than that this wholesaler will have 26 full-fledged planned-in-advance promotions upon which they can confidently concentrate their efforts with the full expectation that the critical few minutes which any one of the 1141 wholesale drug salesmen can put upon a manufacturer's product or promotion will be amply rewarded.

Mr. Nolen will undoubtedly find in this campaign ample justification for his thesis that even a scant few minutes of the time of his salesmen must produce a substantial and measurable volume of sales.

So far as the participating manufacturers are concerned, this program seems to offer many unique opportunities. Certain manufacturers whose appropriation could hardly permit them to aspire to the advertising expenditures required by Life for any sort of adequate representation, can now participate in full page space in this powerful, mass medium. Far more important they will probably find that this particular campaign will return unusual rewards in the cooperative and concentrated effort which they receive from the wholesale salesman and the extent and degree to which retail druggists will actively participate and use their windows, their counters and the display material furnished to them.

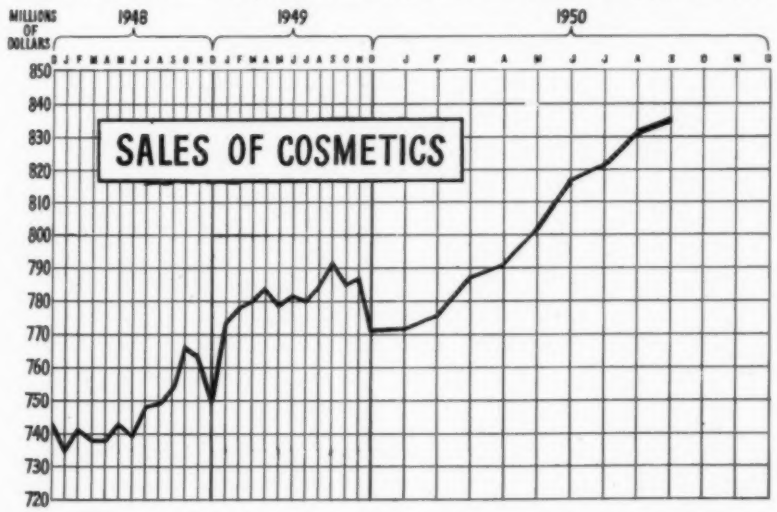
There is something very appealing about a campaign in which manufacturers, wholesalers and retailers are participants and feel that they are all in the same boat in regard to a mutual threat to their interests.

Of course Life Magazine has no way of guaranteeing that any one of its considerable number of millions of readers will follow the advice of this advertisement and buy the products featured, in the drug store. Some few stubborn individuals might like the product advertised and stubbornly or casually pick it up in the super-market, if they see it there.

There might be some vipers in the bosom of this family, that is salesmen of cooperating manufacturers, who will show reprints of this advertisement to certain super-market operators and whisper in their hearing that the smart merchandiser, at the time of this promotion, would have these same products on preferred display.

Things like this are normal hazards of any big program and in the overall picture will be very trivial in their effect on a thoroughly well-conceived advertising and promotion program. The only thing we really hope is that none of the participating manufacturers will join this selected group with their tongue in their cheek, as much as if they were saying to the drug store: "Maybe you will see our products on

Retail sales of cosmetics for the twelve months ended with September 1950 totaled $835,760,000. This compares with $832,336,000 for the twelve months ended with August 1950 and with $791,452,000 for the twelve months ended with September 1949.



NEWS FROM THE CREATORS OF THE SENSATIONAL NEW

RICHFORD SPILLPROOF* PERFUME FLACONS

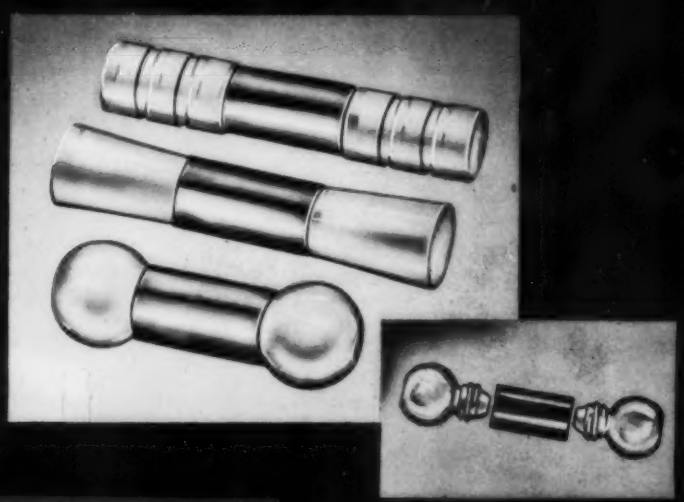
SPILLPROOFS

Top Left:
Plain Round (1 dr.)

Top Right:
Plain Round (1 ½ dr.)

Lower Left:
Pinched Square (1 dr.)

Lower Right:
Watch Case (1 dr.)



DUETTES
for day & night perfumes

Twin ½ dram flacons on polished brass closure

Top:
Fancy Round

Center:
Tapered Hour Glass

Bottom (and inset):
Dumb Bell

New designs (pat. pending) immediately availa or your own suggestions develop by Richford *design engineers*

SPILLPROOFS IN METAL

Plain round (1 dr.) encased in highly polished metal container with flush cap.

RICHFORD CORPORATION

251 FOURTH AVENUE
NEW YORK 10, N. Y.

PATENTS PENDING
*TRADE MARK

display in any super-market you may enter." "And maybe because of these big super-market sales that have been coming our way the very rapid turn-over of our products in your store, which we have so forcefully been demonstrating for many years, ain't what they used to be." "Nevertheless, Joe, we are here to tell you that we are with you 100 per cent no matter what any one else has to say."

This is the kind of advertising that would be an ad salesman's dream and something that happens once in a life time if an advertising salesman conceived it.

We have a feeling that it did not originate at Life, but that it is one of those glorious things that floated in over the transom. We can't even believe that it originated at the advertising agency, not because agencies are afraid of a million dollars but because the instinct in creating and sensing this whole concept is too cannily a bull's eye. Who ever did think it up, we congratulate them for conceiving a fine operation in strategic merchandising and a conception of something that is just exactly right at the right time for the participants.

Growing Vending

Filene's is the pioneer among department stores in the external use of vending machines. This store has now two separate vending operations, one at the Greyhound Bus Terminal in Boston and one at Logan International Airport, Charleston, Mass.

The Greyhound unit takes up about 167 square feet and contains 14 machines. The Logan unit is somewhat smaller, with eight machines. About 125 pieces of women's merchandise, such as necklaces, slips, panties, earrings, hoisery and cosmetics are vendered. Several department stores, including Hudson's Dayton Co. and Richards, have experimented with vending machines, which however are inside operations. Filene's consider their vending operations as direct branches of their store.

Although they rapidly stepped into the second operation after a relatively short test in the Greyhound station, this company has not yet admitted to being fully convinced as to whether automatic merchandising of women's accessories is a success.

However, there is a very definite rumor in the vending machine industry that this company has already planned an order for future delivery of 1,000 machines and this rumor includes a conviction that someone, somewhere has heard that definite plans for the future include the ultimate use of 10,000 machines. Whether these rumors are true or not only time will tell.

However, the big retail interests cannot entirely ignore the recently stated figures that the public this year will drop $1,000,000,000 of coins into vending machines.

Functional Discounts

The hearings before the Federal Trade Commission on the Champion Sparkplug case is arousing unusual interest because the contention of the government seems to strike at the heart of the normal and accepted trade practices of "functional discounts."

An F.T.C. official has charged that a deliberate effort is afoot to frighten small business into believing that the government is trying to outlaw the functional discount pricing system by which manufacturers, wholesalers and retailers pay different prices for the same article.

This official flatly denied "any attempt to prohibit the granting of functional discounts as such, any attempt to eliminate wholesalers from the distribution picture or any attempt to drive independent dealers out of the sparkplug business or any other business in which they desire to engage."

In spite of this pious declaration, it is a little bit difficult for readers to separate these statements from government charges in the Champion case.

Less Planning to Buy

According to a recent DuPont survey, people are showing a more open mind less conscious planning in shopping in a supermarket than has been the case in previous years. In this survey 66.6 per cent of the purchases are decided at the point-of-sale after reaching the store.

If there is a distinct trend in this direction in mental attitudes in shopping, as the Du Pont's series of surveys seem to indicate, it is possible that this means that open display of a wide variety of competitive merchandise, plus self-service is more and more tending to convince women shoppers that previous planning is no longer as necessary as it used to be when products were not easily visible, open to comparison and readily accessible.

For the Prophet

This is the time of the year when many business men are called upon to take the mantle of a prophet and go on record in speeches and articles as to prospects for next year and as to the business prospects in the future.

Arno H. Johnson, vice president and director of media and research for J. Walter Thompson, has gathered the statistics which at least permit such a business man to be factual. According to Mr. Johnson, our continuing high birth rate seems to end all doubts as to population trends.

This should mean that the U. S. will have more than 162 million consumers in its 1955 market. This is credible not only because of the birth trend but because of the 20 million increase which took place in the last decade.

In regard to purchasing power, Mr. Johnson cites the $30,000,000,000 of savings bonds which will mature in the next five years and which are very widely held in small denominations. The shift in income distribution is illustrated by the fact that in 1941 only 1,564,000 consumer spending units had incomes of $5,000 before taxes, whereas now there are 6,240,000 with incomes of $5,000 after Federal income taxes.

There is a very wide increase in spending when families move up from one income group to the next and part of the tremendous inflationary spending which we have been facing is due to the fact that there are now 21,300,000 families with incomes over $3,000 after Federal taxes as compared to 5,703,000 before taxes in 1941.

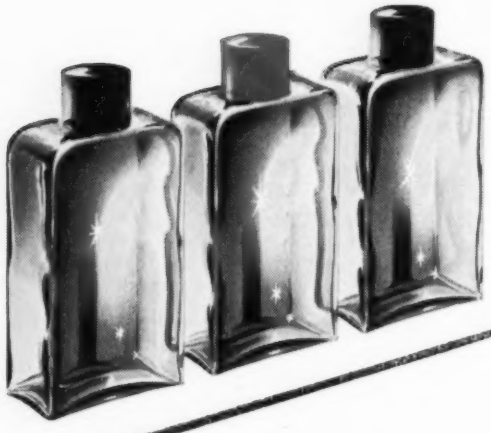
Any negative reasons which can be cited to show that there will be marked changes in the trend in the number of births, in the increase in the total population, in the number of employed, married women in the percentage of people now in or entering into the higher brackets appear to be considerably overwhelmed by a greater and more logical number of positive factors supporting this continuing trend.

House-to-House

Avon-Allied Products still continue the spectacular expansion in business volume and in profits that has been taking place during the last 10 years or so.

For the fiscal year of 1950 ending September 30, 1950 this company reported consolidated net sales of $29,929,734 as compared to $23,931,855 for the similar period of 1949.

On the Avenue



or on the Counter

it's the Cap with Color that Clicks!

In milady's hat or bottled products... it's color that catches the eye.
And now you can employ this effective selling aid on *your* bottles!
Leaders in the drug, cosmetic and pharmaceutical fields are featuring closures of Plaskon Molded Color in a wide variety of tints and styles.
Here are *solid, permanent, non-chipping* colors—in a plastic that is resistant to solvents, greases, oils, dilute acids and alkalies. Even the smooth, satiny finish adds buy appeal with its warm and friendly feel.
Pharmacist, retailer, wholesaler or manufacturer... it will pay you to contact your supplier for further information.

Your package can help sell your product... cap it with

PLASKON DIVISION • LIBBEY • OWENS • FORD GLASS COMPANY
2110 Sylvan Avenue • Toledo 6, Ohio
In Canada: Canadian Industries, Ltd., Montreal, P. Q.
Branch Offices: Boston, Chicago, New York, Los Angeles, Rochester
Manufacturers of Molding Compounds, Resin Glues, Coating Resins

PLASKON
MOLDED COLOR

Profits before taxes this year were $4,786,017 as compared to $3,448,225 and profit after taxes $2,726,011 as compared to $2,064,867 in 1949.

Advertisement Position

According to The Advertising Research Foundation's business paper studies, there is no difference to the value or the readership between a left-hand and a right-hand page of advertising in a business paper.

There is no evidence that a well prepared advertisement cannot do as well in the back of the book as in the front section. Out of 61 top ranking advertisements studied for reader interest, 44 were in the first half of the paper and 17 in the back.

An important finding in the readership of advertisements indicates that advertisements which reflect the editorial policy and tone of the publication usually fare better than those which make no attempt to direct their advertising to what the magazine's readers want in the way of information. This would seem to indicate that informative advertising directed specifically toward the interest of an industry is far more important in producing results than just the mere question of position.

Expanding Self Service

If you want to see some of the daring and vigorus experiments in retailing, by and large you will have to travel to the southwest and the Pacific Coast. For some reasons, which may include the wide open spaces and some still remaining vestiges of the pioneer spirit, the folks that live in these places have been trying out all sorts of plans to cultivate the customer with a maximum of quick and easy conveniences.

One of the most progressive experimenters in testing out the variety of goods in a super-market to see just what the public will accept is Henke & Pillot. Although this super-market chain has long had successful departments in drugs and toiletries, and has had in five stores, four in Houston and one in Port Arthur, a soft goods or dry goods section, the first big major experiment in soft goods super-marketing is being opened in Baytown, Texas.

Located at the front of the huge super-market, this new soft goods department is directly in the flow of traffic from the main entrance and also from the 12 grocery check-out counters. This department will occupy 2,000 square feet of space display in aisle cases especially designed.

Some of the goods for sale in this department include hosiery for all members of the family, women's day-time dresses, sportswear, skirts, men's work clothes, and children's and infant's wear. A linen and domestic section, which includes all sewing notions, is also part of this new department. This new department has been well received, particularly for work clothes.

One store executive attributes the acceptance of this department to the fact that "family shopping in the grocery section carries over to the dry goods department."

De-Emphasis

We haven't heard the word "de-emphasis used in this country, but it is not at all unlikely that it is on the way to becoming a part of our business vocabulary. Our neighbors north of the border invented the word de-emphasis and are now using it to describe a critical and troublesome retail situation that is also developing in this country.

Canadian druggists and department stores are running into the same dynamic and explosive growth in self-service and grocery super-markets that we see developing in this country. These self-service stores are in a similar way encroaching heavily upon the traditional products of other retail trades that may be classified as consumer conveniences because of the character of the product, the retail price and the degree of consumer recognition which has been won through mass advertising.

Some retail interests up North almost became involved in an organized boycott of certain national brands, but quickly retreated from this position when advised that they were putting themselves in a dangerous and precarious legal position by any action of this sort. As a result of this quandary and the growing clamor to take some sort of action the word de-emphasis developed as a form of substitute action.

De-emphasis means just about what you would guess it means. It is the reverse action, negative side of retail store promotion. We have had in this country many notable examples of what can happen to even the most famous leading brands of merchandise when a retailer decides to apply de-emphasis.

A few years ago one of the leading chains took the three leading volume toilet soaps and alternated each one of these brands in display positions. These display positions were eye level, top of shelf considerably above eye level and bottom shelf around ankle level. In spite of the enormous volume of advertising which has each year for many years propelled the sale of these brands and in spite of the almost universal acceptance by the public for these brand names which make them as much of a utility as a loaf of bread, the sale of any one of these brands varied more than 50 per cent as it was moved from eye level to an inferior display position.

A little while ago a drug chain in Philadelphia made a similar test with the five leading brands of shaving cream, consecutively altering the display position of these brands. Again this test proved that irrespective of consumer advertising and preference, the sale of any one of these brands was affected proportionately by the character of the display position and the difference between the most favorable and least favorable ran around 50 per cent.

Everyone in the trade remembers how the then dominant tooth paste manufacturer won the active ill-will of retail druggists by the attitude he assumed toward fair trade when it was first established. Many druggists at this time applied de-emphasis to this brand and the results were so immediate, drastic and clearly visible that this manufacturer in a frenzy completely reversed his stand and went out to the opposite end of the limb as a leading exponent of fair trade.

We have long felt that a titanic battle is due in the distribution of many mass advertised and mass distributed consumer conveniences.

The trend toward self-service, which inevitably means a trend toward a concentration of traffic whether it is in a grocery store or a variety store or any other kind of store that can continually bring people in heavy volume or whether it is toward a vending machine in areas of dense human concentration, such as factories and communication centers, self-service is obviously inevitable for products of this character. To believe that the type of retailer who has no hope of controlling traffic of this sort and who is committed to a certain degree of personal selling because of some phase of his business will submit without a struggle, perhaps a very vital struggle, is completely naive.

This latter class of retailer cannot possibly compete on equal terms, nor

*Fully protected by U. S. Patent 2,491,947. Foreign patents pending.

a patented* method for printing polyethylene bottles

Color engraving — Hot stamping Patented Process — Exclusively ours!

Assures a permanent, colorfast, debossed, color wiped-in effect on polyethylene bottles, to a high luster.

Alcohol proof — cannot rub off.

Superior reproduction facilities for 250,000 per day.

All colors including gold and silver.

Registers to the utmost detail, flat or design motif.

Your inquiries respectfully solicited.

Modern Art Printing Company

PLASTIC DECORATIVE SPECIALISTS

67-73 KENT STREET, BROOKLYN 22, N.Y.

Telephone: EVergreen 3-4388

can he afford the enormous dilution of retail distribution which this new move in distribution is bringing. To the manufacturer himself this one question of retail dilution may prove a troublesome problem because if it is inevitable that he must move over to such groups as the grocery super-market, where exposure to the number of consumers is far greater and has far greater frequency, then he must remember that no class of retailer has ever applied the system of unit control more closely and with a keener knowledge of just what turn-over means than the large chain operators in the grocery field and the new-comers who are rapidly bringing the vending machine to a new retail status.

Department of Commerce Monthly Retail Trade Report

Retail sales of all kinds in drug and department stores showing sales for the month of October 1950 as compared with the same period in 1949.

	Department Stores	*Drug Stores*		*Department Stores*	*Drug Stores*
Atlanta	+9	+5	Minneapolis	+7	+7
Baltimore	+2	+6	Milwaukee	+6	+7
Birmingham	+18	+2	Newark	+7	X
Boston	+2	+9	New York	+5	+2
Chicago	+4	+4	Philadelphia	+6	+4
Cincinnati	+7	+6	Pittsburgh	+18	+6
Cleveland	+14	+12	Providence	+2	+1
Dallas	X	+6	St. Louis	-5	-7
Detroit	+15	+7	San Francisco	+6	+2
Los Angeles	-5	0	Seattle	+11	+12

Patents

The Patent Office has the Supreme Court peeved, annoyed, disgusted and exasperated. This office got a very sound and wholesome spanking in a recent decision over some of the silly, trivial contrivances upon which this Patent Bureau has been wasting its time and piling up a backlog of uncompleted work that has delayed important and decisive patent cases for many months.

In the future, the Court very plainly told the Patent Office, the test for granting patents must be stiffened and must adhere more closely to constitutional standards. Our constitutional fathers, the Court said, "never sanctioned the patenting of gadgets. Patents serve a higher end—the advancement of science." To clinch this instruction the Court quoted Article 1, Section 8 of the Constitution, which says that the purpose of patents is "to promote the progress of science and useful arts."

According to the Court, the Patent Office, "has placed a host of gadgets under the armor of patents" in grasping the opportunities to expand its own jurisdiction. In doing this the Court said the Patent Office has acted "like most administrative agencies."

The particular device which produced this indignant reproof for the Patent Office is a case against the Great Atlantic & Pacific Tea Company for infringing on a tray-like device for store check-out counters.

Justice William O. Douglas in a separate concurring opinion wrote, "The fact that a patent as flimsy and as spurious as this one has to be brought all the way to this Court to be declared invalid dramatically illustrates how far our patent system frequently departs from the constitutional standards which are supposed to govern." Justice Douglas then added that the patent involved belonged to a "list of incredible patents which the Patent Office has spawned."

Super Salesman

Several months ago a super-salesman came to New York City. This man represented a grocery super-market chain of about 30 stores located in a restricted area of one state and he was one of the chief merchandising executives.

The purpose of his visit to New York was to persuade a number of perfume and cosmetic manufacturers that they could no longer afford to refuse recognition to his particular super-market chain and that he was ready and eager to prove to them that this particular grocery chain controlled too important a part of the purchasing power intheir community to ignore.

This was a case where the buyer turned salesman in order to sell the seller. It was one of those curious and interesting things that happen every once in awhile in marketing.

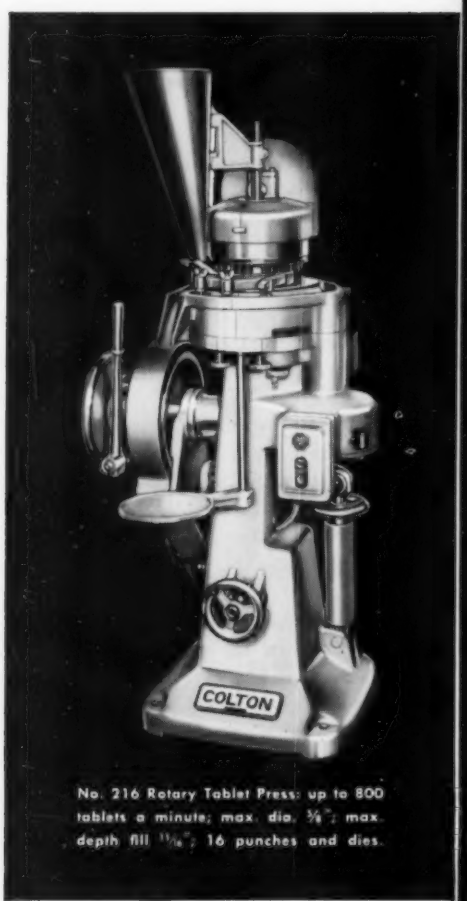
This super-salesman made a sales presentation that compared favorably with anything ever originated in a manufacturer's sales department. In his portfolio were many beautiful photographs showing the general appearance of the stores, the kind and volume of the traffic at various hours of the day and a number of shots of the perfume and cosmetic department which gave clear evidence that it would bear favorable comparison to similar departments in a majority of the finest drug or department stores.

Here is some of the factual data that accompanied these photographs as sales evidence that this store should be incorporated in the distribution pattern of the perfume and cosmetic manufacturers.

The traffic in the stores of this chain averaged one million people a week, with a larger part during evening hours. These stores kept open from 7:30 a.m. to 11 p.m. In the cosmetic and perfume department of each store two trained salesgirls were in constant attendance and operated in two shifts. These girls operated on the basis of a salary, plus a commission of five per cent which came from a pool of P.M.'s furnished by manufacturers. Earnings of the salesgirls, giving evidence of the character of their training, their experience and their sales ability, averaged between $60 and $90 a week.

Following this was a list of the manufacturers using selected distribution predominantly featured in department stores with their sales for a full year in this grocery chain. We produce those sales below, but for obvious reasons omit the names of these class manufacturers.

A	$ 2,203.68
B	4,428.52
C	10,684.41
D	3,186.36 (3 mos.)
E	5,785.18
F	1,929.98
G	1,708.00
H	17,025.19
I	7,504.00
J	1,424.25
K	456.30
L	8,822.64
M	18,020.86
N	11,079.77
O	1,436.35
P	2,213.52
Q	11,176.85



No. 216 Rotary Tablet Press: up to 800 tablets a minute; max. dia. ⅛"; max. depth fill 1/16"; 16 punches and dies.

Nos. 227 and 233 Rotary Tablet Presses: No. 227—up to 1800 tablets a minute; max. dia. ½"; max. depth fill ¾"; 27 punches and dies. No. 233—up to 2250 tablets a minute; max. dia. ⅜"; max. depth fill ¾"; 33 punches and dies.

Arthur *Company*

DIV. SNYDER G COMPANY
3419 E. LAFA MICHIGAN
SPECIALISTS IN PHARMACEUTICA ACHINERY FOR OVER 65 YEARS
OFFIC TIES

NEW PRODUCTS AND NEW PACKAGES

ABBOTT LABORATORIES are distributing House Dust Extract, Refined and Concentrated, for hypodermic injection. The extract is used to protect the allergic patient from the maximum amount of allergen which he may encounter in his usual pursuits. The dust used in the extract is derived from mattresses and other household furnishings. The treatment should be individualistic, with the first dose being very weak, and the succeeding ones slowly increased, depending on the patient's reactions. This new extract is much stronger than Abbott's previous product and must be administered with extreme care.

DOLCIN CORPORATION has introduced a new, economy-size bottle of 200 Dolcin tablets which retails for $3.50 and has reduced the giant size 500-tablet bottle to $8.

ESTRO PRODUCTS CO. has repackaged Vera-Genic Estrogen Creme, and prepared it for national distribution, following a successful testing period in the Los Angeles area. A liquid type cream, Vera-Genic is easily absorbed into the skin, leaving no residue or filler on the surface to be wiped off. It is an effective all-around cream and can be used as a powder base, hand cream, or night cream.

ISRIN-OLIVER CO. has prepared Fortissimo Brand Seasoning for Saltless Foods. It adds taste to the saltfree diet and eliminates to a certain extent the craving for salt.

IVES-CAMERON COMPANY, INC. is distributing Preveral Capsules, a vitamin-mineral supplement for pregnancy and lactation, and whenever mineral-vitamin deficiencies exist. In prenatal care and during lactation the dosage is from 1 to 3 capsules daily, or as directed by the physician. They are supplied in bottles of 100 capsules.

PRINCE MATCHABELLI, INC. has framed its new "Beloved" perfume in a rose-red heart fringed with lace, especially for Valentine's Day. The package is selling for $2.75. Also available in the valentine heart are Crown Jewel Perfume, Stradivari, and Duchess of York.

SCHENLEY LABORATORIES, INC. have announced the preparation of Syncrobin, which combines the immediate and prolonged therapeutic effects of procaine and potassium penicillin G with the powerful antibiotic action of dihydrostreptomycin. It is incidated in disorders of mixed microbic origin especially those involving the genito-urinary, respiratory or intestinal tracts. It is found effective in many ear infections, cerebral abscessed, meningitis, wounds, and gonorrhea resistant to penicillin alone. It is supplied in single dose vials for intramuscular use only, and in 5 and 10 dose vials.

SCHERING CORPORATION is offering Acetoxy-Prenolon which has effected improvement in many instances, in clinical trials on patients suffering from rheumatoid arthritis. No side actions of any importance have been reported, according to the company. No definite dosage schedule has been established, although the suggested dosage schedule is said to be 100 mg. the first day, 200 mg. the second day, and 300 mg. daily thereafter for a total of 14 days. Thereafter, 200 mg. every second day for 30 to 60 days of therapy.

Schering has also introduced Trimeton Maleate Solution which is indicated in relieving the eyes of irritation and allergic symptoms such as occur in hay fever.

THE STERLING-WINTHROP RESEARCH INSTITUTE has isolated Levophed Solution, a new drug for treatment of shock. It is a synthetically produced hormone of the adrenal medulla and has been found in clinical trial to prevent fatalities that might otherwise occur as a result of lowered blood pressure. In a significant number of cases, according to Dr. J. B. Rice, medical research director of the Institute, shock patients who failed to respond to blood plasma alone rallied when Levophed was added.

The most potent blood pressure stimulant now available, Levophed must be used with great care and only under experienced expert direction.

U. S. VITAMIN CORPORATION has prepared water-soluble vitamin A in soft gelatin capsules (Aquasol A Capsules). These capsules are said to have overcome the problem of Vitamin A deficiencies in patients who are unable to utilize properly or tolerate oily solutions of vitamin A.

THE UPJOHN COMPANY has prepared Sulfa-Sugracillin, a pleasantly flavored suspension containing 100,000 units of penicillin and 0.25 gm. of sulfonamide mixture in each 5cc. This suspension represents the benefits of enhanced antibacterial action of penicillin and combined sulfonamide therapy which can be readily given to infants and children. It is used in the treatment of infections caused by organisms susceptible to penicillin and sulfonamides, including pneumonias, Vincent's angina, follicular tonsilitis, and others.

New Perfection DROPPING PARTS

For Attractive Appearance . . .
. . . Perfect Performance

The New Perfection line of dropping parts is designed to meet your exacting demand for modern-looking units that function perfectly. We know that the user's satisfaction with your product may depend upon the reliability of the dropper—And, New Perfection dropping parts present your preparation at its very best.

The New Perfection reputation for excellence is maintained by use of the best quality materials, scrupulous attention to cleanliness and rigid inspection of all parts before delivery.

DROPPER GLASSES

are available in a wide variety of styles and sizes; plain or CALIBRATED in any color to mark specific dosages.

BULBS

are supplied in many styles and colors. Oil Resisting AMEKINE synthetic rubber is used for oil preparations; natural rubber is supplied for other products.

CAPS

of plastic or metal, can be furnished in a complete range of sizes and colors.

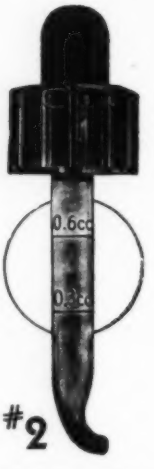
BOTTLES

in an attractive modernistic style in Amber, Blue, Green or Clear glass, are available, complete with dropping parts, in the following sizes: 2 cc., ⅛, ¼, ½, 1 and 2 oz.

DROPPER GLASSES CAN BE

CALIBRATED
IN COLOR

An inexpensive extra that adds great convenience to the use of your preparation. The dosage you desire in the color you specify is accurately and permanently printed on the dropper glass. Trade-marks and firm names can also be imprinted.



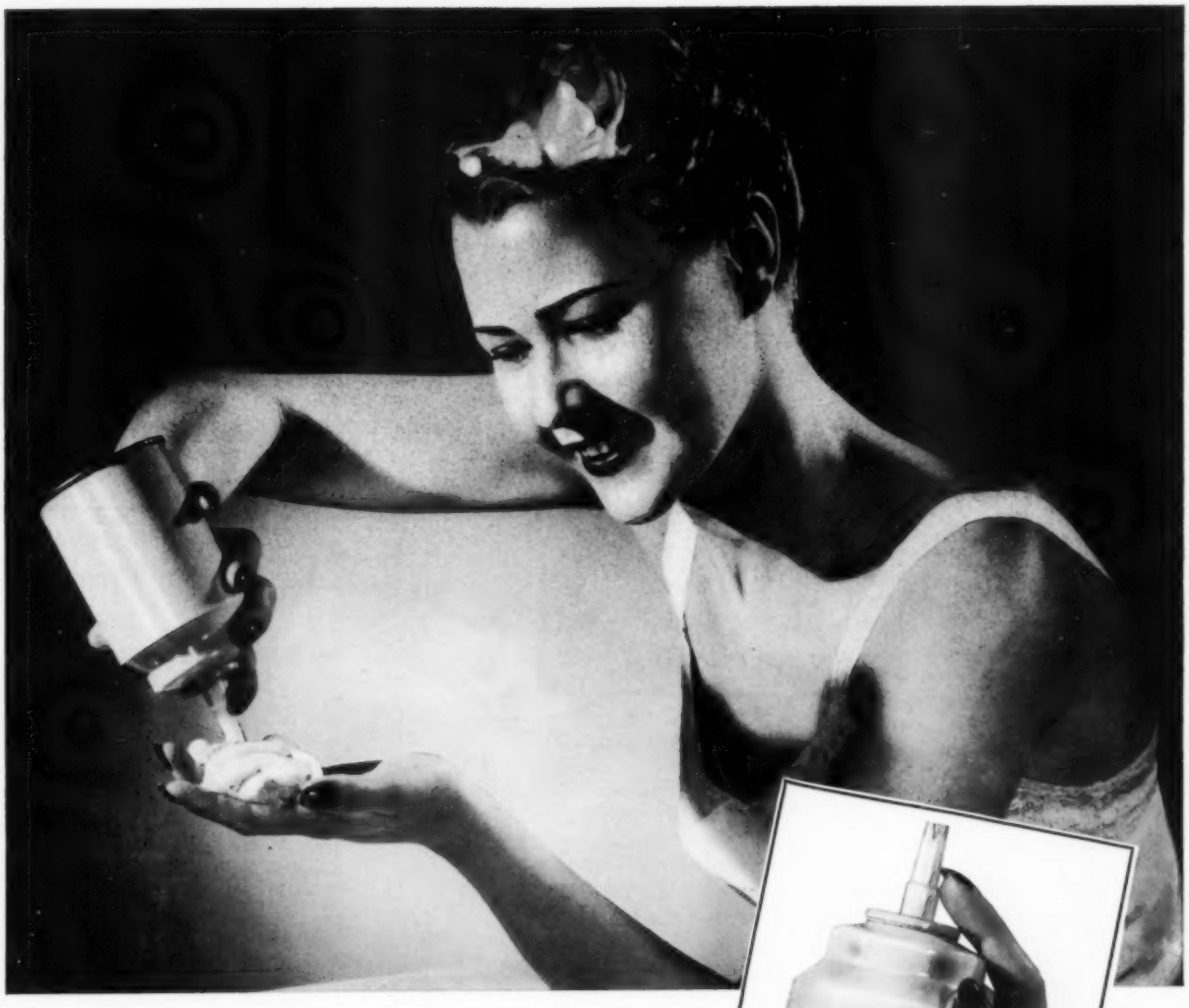
We Can Supply Dropping Parts To Fit Your Bottles or Furnish Complete With Our Own Bottles

Write for Samples and Quotations

PENNSYLVANIA GLASS PRODUCTS CO. INC.

"Glass Goods of the Better Kind"

430 N. Craig Street • Pittsburgh 13, Pa., U. S. A.



Another NEW USE FOR CROWN SPRA-TAINER

Spra-tainer is ideally suited to a whole host of "Soap Line" Products which henceforth will s-p-r-a-y: Shampoos, Bubble Baths, Colognes, Shaving Creams, Soap and Detergent Solutions. What's YOUR idea? There's no limit. Just make sure the pressurized container you use is Spra-tainer—*first on the market, first in sales*—"no-side-seam, no-top-seam."

This is the famous 12-oz. LARGE Spra-tainer. See also the 6-oz. SQUAT and the NEW 6-oz. TALL Spra-tainer.

☐ Please send me literature on the Spra-tainer
☐ Please have a Crown Sales Representative call

Name _____
Address _____
Firm _____
Crown Can Co., Erie Ave. at H St., Phila. 34, Pa.

CROWN CAN

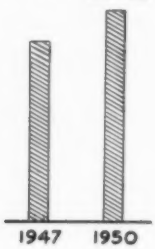
One of America's Largest Can Manufacturers

Plants at Philadelphia, Chicago, Orlando • Branch Offices: New York, Baltimore, Pittsburgh, St. Louis • Division of Crown Cork & Seal Company

FOURTH "FREON"
AEROSOL-PACKED PRODUCTS GAINING IN

Survey tells what dealers think about aerosols . . . Indicates bright future for aerosol manufacturers!

70% of all dealers interviewed stock aerosols



This latest "Freon" Survey shows that aerosol-packed products are now sold by the majority (70%) of retailers including drug, department, food, hardware and variety stores and service stations. This represents an increase of 13% over the situation in 1947, when the first "Freon" Survey was conducted.

Insecticides best sellers . . . but new products show gains

Dealers report that while insecticides are still their best-selling aerosols, other aerosol products such as room deodorants, moth proofers, paints and plastic sprays are runners-up. New aerosol products—personal deodorants, shampoos, shave creams, suntan lotions and the like have recently appeared on the market and should receive hearty approval.

Aerosol method of dispensing is better —report 80% of dealers

Asked what they think of aerosols, the Survey indicates that 80% of dealers interviewed are of the opinion that aerosols are superior to other methods of dispensing various products. That this belief is growing is seen from the 1947 report in which 72% of the dealers favored aerosol methods.

Drug Stores best outlets—Food Stores gaining rapidly

Of dealers interviewed in the "Freon" 1950 Survey, 94% of the drug store owners and managers stated that they now stock aerosol-packed products . . . an increase of 10% in the past four years. Food Stores are moving up rapidly in importance—from only 25% stocking aerosols in 1947 to 45% in 1950. Department Stores and Hardware Stores are also major outlets.

DUPONT
REG. U. S. PAT. OFF.
BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY

"FREON" SAFE

SURVEY SHOWS

DEALER ACCEPTANCE AND SALES

Low-pressure type of aerosols now most popular

Both in 1949 and again in 1950, dealers were asked whether they stocked high- or low-pressure aerosols. The "Freon" Survey indicates that 58% now stock the low-pressure type; 9% stock high-pressure aerosols and 33% stock both types. It will be noted that a total of 92% of the dealers carry low-pressure aerosols. Dealers report sales of low-pressure aerosols exceed high-pressure types by 20%.

Customers insist on safety and there's no safer propellent than "Freon"!

Safety is an important factor in aerosol sales. It is often in the customer's mind when buying . . . often spells the difference between a sale and no sale. That is why it's a definite dealer-asset to be prepared to stress the many safety characteristics of "Freon" propellents. These propellents are nonflammable, nonexplosive, of extremely low order toxicity . . . harmless to foods, furs, flesh, fabrics and finishes. They have no color or taste and are practically odorless.

Don't take chances! Consider these "Freon" exclusives!

"Freon" and only "Freon"—can offer all these safety benefits *plus* a range of pressures from 1 to 120 lbs. per sq. in. gauge. And "Freon" alone can provide the special solubility characteristics needed for certain ingredients. So take no chances . . . insist upon using only "Freon" safe propellents!

FREE! *Your own digest copy of this 4th big Survey of the aerosol market . . . the only report of its kind anywhere—together with complete data on "Freon" propellents. Write today: "Kinetic" Chemicals Division, E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware.*

Plan now to aerosol-package *your* product today!

HERE'S HOW TO GO ABOUT IT:

1. Determine that there is a market for the contemplated product.
2. Develop a stable formulation, including propellent, which can be packaged in a suitable container.
3. Shelf-test the proposed finished-product package before production or sample merchandising is attempted.
4. Have a quantity packaged for test marketing. There are custom loaders who will fill quantities as low as 5,000.

"KINETIC" TECHNICAL SERVICE WILL HELP YOU

As a service to users of "Freon" safe propellents, Du Pont is ready to assist any manufacturer in entering the aerosol market. This includes aid at every step from market exploration to planning shelf-testing and interpretation of the results.

If you are thinking of entering the aerosol market, be sure to find out how "Kinetic" may be of real help to you. No obligation. E. I. du Pont de Nemours & Co. (Inc.), "Kinetic" Chemicals Division, Wilmington 98, Delaware.

PROPELLENTS

KINETIC REG. U. S. PAT. OFF.

"FREON" is Du Pont's registered trade-mark for its fluorinated hydrocarbon propellents.

For Revlon the choice is a trim Plaxpak bottle for Aquamarine Lotion Deodorant. Fingertip pressure on the colorful bottle releases exactly the desired amount of lotion. Controlled dispensing — an inherent feature of the Plaxpak bottle — is but one of many advantages. It is also light in weight, nice to the touch and smashproof. Color and decorative possibilities are unlimited. In the Plaxpak bottle, you have unique qualities to stimulate buying and to foster increased product use.

Only the best is

PRODUCTS OF OUR ASSOCIATES INCLUDE:

AUTOMATIC PACKAGING EQUIPMENT

STANDARD-KNAPP
Division of Hartford-Empire Company
PORTLAND, CONNECTICUT

GLASS MAKING MACHINES

GLASS DIVISION
Hartford-Empire Company
HARTFORD 2, CONNECTICUT

HIGH SPEED AUTOMATIC PRESSES

HENRY & WRIGHT
Division of Hartford-Empire Company
HARTFORD 5, CONNECTICUT

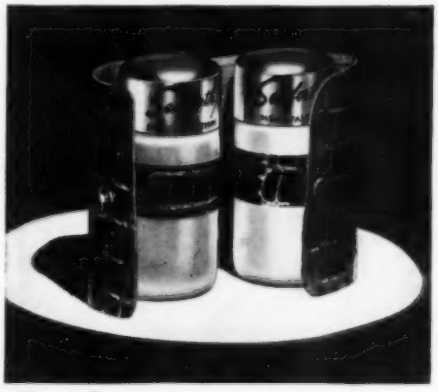
PREMIUM QUALITY STAMPING PRESSES

THE V & O PRESS CO.
Division of Hartford-Empire Company
HUDSON, NEW YORK

For Courtley an embossed, flask-shaped Plaxpak bottle provides a handy, handsome, lightweight container for Antiseptic Body Powder. A quick squeeze produces a fine powder spray.

For Youngsters this sleek but tough airplane of Plax Polyflex* means hours and hours of outdoor fun. Polyflex is oriented polystyrene sheet — strong, easy to work, and low in cost.

For Richard Hudnut's fitted case, two light pink Plaxpak bottles provide attractive containers for Du Barry Skin Freshener and Foundation Cream. Fitted cases are smarter, lighter and more convenient with Plaxpak bottles.



For Seaforth Plaxpak bottles form a compact traveler's twosome. Light and smash-proof, the kit can be squashed into a suitcase and hauled anywhere that duty calls. Kit has Seaforth Shaving Lotion and Men's Talc.

good enough

PLAX
FOR PLASTICS
NOT SUBSTITUTES — IMPROVEMENTS

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Subsidiary of Hartford-Empire Company
P.O. BOX 1019, HARTFORD 1, CONN.
In Canada, Plax Canada, Ltd., Toronto
Sales Offices: New York City, Syracuse, Philadelphia, Cincinnati and Chicago.

HELPFUL PLAX LITERATURE
Catalogs on Plaxpak bottles and other Plax products are available on request. Also available is a booklet "Fabrication of Polystyrene."

Plax blow-molded products are made under the following U. S. Pats.: 2128239, 2175053, 2175054, 2230188, 2230190, 2260750, 2283751, 2349176, 2349177, 2349178. *Reg. U.S. Pat. Off.

IF REDUCING THE CONSUMPTION OF ALCOHOL

IS YOUR PROBLEM, THEN WE RECOMMEND

THE USE OF OUR

CONCENTRATES L. A. C.

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NEWS...

Dr. Feirer Becomes Squibb V.P.

Dr. William A. Feirer has been appointed to the newly created post of vice-president in charge of scientific affairs at E. R. Squibb & Sons, according to Carleton H. Palmer, chairman of the board.

He has been executive vice-president of Sharp & Dohme, Inc. for the past several years, beginning in the research laboratories, and serving later as medical director, director of the medical research division, and vice-president in charge of medical research.

DR. WILLIAM A. FEIRER

Smith-Dorsey Appointments

Frank H. Stone has been appointed division manager of the north central division of the Smith-Dorsey Company and will maintain headquarters in St. Paul. His territory includes Minnesota, Wisconsin, North and South Dakota, and northern Michigan and Iowa.

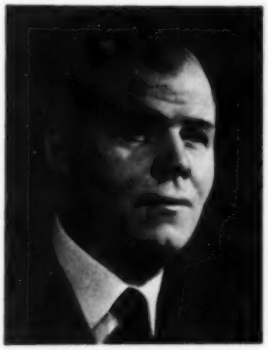
The company has also announced the appointment of Dwight W. Duke as division manager of the Denver division, which includes Idaho, Montana, Utah, Wyoming, Colorado, Nebraska, and Kansas.

Wyeth Constructing Penicillin Plant

Wyeth, Inc. is constructing one of the most modern laboratories in West Chester, Penna., for the conversion of penicillin into various forms suitable for medical and veterinary uses. Expected to be ready for operation by July of this year, the new building will cost $1,500,000. In addition to the penicillin operations, the structure will house the Wyeth antibiotic control and development research laboratories.

McKeen Named Pfizer Board Chairman

John E. McKeen, president of Chas. Pfizer & Co., Inc., has been named chairman of the board of the firm, filling the vacancy created by the death last July of John L. Smith. He will retain his post as president. The board simultaneously elected J. William Stuart, director of the company's industrial relations department, to the board of directors.



JOHN E. McKEEN

J. WILLIAM STUART

Foster-Forbes Appointments

William P. Forbes, son of the late William C. Forbes, has been named manager of the Chicago sales office of Foster-Forbes Glass Company, with offices in the Pure Oil Building, 35 East Wacker Drive. A. D. Braun, sales manager for the company in Wisconsin, will act as consultant to Mr. Forbes. The latter succeeds Robert F. Fixel, who has been moved from the Chicago sales office to the home office in Marion, Indiana, where he will manage prescription ware sales.

Appointed by Hudson Products

Dr. Harold W. Brown has been appointed chief medical research director to the Hudson Products Company, according to Allen Parkinson, president.

Dr. Kitchen Promoted

Dr. Delmas K. Kitchen, vice-president of Bristol-Myers has been promoted to vice-president and chief medical counsel of the company and its affiliated firms. He has been associated with Bristol-Myers since 1947.

Named Director of CSC Pharms.

M. M. Ricketts, formerly with Merck & Co., Inc., has been appointed director of C.S.C. Pharmaceuticals, a division of Commercial Solvents Corporation, according to H. J. Henry, vice-president in charge of sales. He has held important executive positions with American Home Products Corporation and Wm. R. Warner & Co., Inc., in addition to that of sales promotion manager of Merck & Co.

M. M. RICKETTS

Hines Named Exec. V.P. of Brayten

Richard Kennon Hines, secretary and director of Vick Chemical Corporation, has been named executive vice-president of Brayten Pharmaceutical Company, according to Lupton Patten and John W. Bradley, M.D., chairman of the board and president, respectively, of Brayten. Mr. Hines joined Vick Chemical Company in 1934, later becoming secretary, director and general counsel. He is also president and director of Alfred D. McKelvy Company, chairman of the board and director of Jensen-Salsbery Laboratories, Inc.

Maurella Prods. Purchased

H. Bruce Hagler, president of Associated Brands, Inc., has announced the purchase of Maurella Products. This new division will be under the management of Maurice Handman. Featured brand names of the line are Essence Imperiale Russe, Mastins Eye Lifts and the line of children's toiletries under the name, Kidmetics.

Armour Labs. New Divisions

The Armour Laboratories are opening two new division offices in New York and Dallas this month to take care of rapidly expanding demands for its pharmaceutical products. A third office is now being organized in San Francisco.

Four division offices, each with full control of its geographical area, warehouses, and office and detailing forces are replacing the several district offices controlled and supplied from Chicago, according to T. E. Hicks, general manager. The Chicago office is already in operation at 520 North Michigan Ave.

The New York office, headed by E. A. Coons, transferred from Philadelphia, will have jurisdiction over six New England states, New York, New Jersey, Eastern Pennsylvania, Maryland, Delaware, Virginia and West Virginia, the District of Columbia, and North Carolina.

The Dallas office, headed by B. H. Powell, will serve Texas, New Mexico, Louisiana, Oklahoma and Arkansas.

Huisking Moving to Brooklyn

Chas. L. Huisking & Co., Inc. and its various divisions are moving from their present location on Varick St., New York, to 45 Clinton Ave., Brooklyn. The Huisking interests have purchased the large, modern factory and warehouse which was formerly the home of Conti Products Corp., now merged with J. B. Williams Company at Glastonbury, Conn.

This move will enable Huisking to extend its manufacturing operations, some of which are already carried on at the Brooklyn address. Formal announcement of the date of removal will be made later.

Drug & Chem. Ass'n Election

Ralph A. Olson, Chicago branch manager of S. B. Penick & Company, was elected president of the Chicago Drug & Chemical Association at a recent meeting held at the organization's luncheon at the Palmer House. He succeeds Walter R. Nay, who will serve ex-officio as a member of the board of directors for 1951. Other officers elected were Stanley M. Lind, vice-president; Vince Farrar, secretary; T. J. Callahan, treasurer. Roger M. Baker, J. C. Browning, Thomas F. Glynn, G. H. Reinier, and George H. Stanton were appointed directors and will serve two years.

RALPH A. OLSON

To Represent Thurston & Braidich

The Nolte Brokerage Company, 721 Clark Ave., St. Louis, has been named representative in that city by Thurston & Braidich for gums in addition to vanilla beans. Nolte is taking on the complete line of water-soluble gums for Thurston & Braidich, serving the pharmaceutical, printing, adhesive, food and allied industries, as well as natural resins for distribution to the paint, varnish and lacquer field.

Swersey with Bymart

Joseph Swersey has been appointed manager of the variety chain division in charge of sales and merchandising for Tintair, according to Phil Kalech, vice-president and sales director of Bymart, Inc. He was formerly manager of chain store sales for Eversharp, Inc. and is establishing offices for his own sales staff in the national headquarters of Bymart, Inc. at 677 5th Ave., New York.

JOSEPH SWERSEY

Dr. Britton Named ACS Pres.-Elect

Dr. Edgar C. Britton, director of the organic research laboratory of the Dow Chemical Co., has been chosen president-elect of the American Chemical Society. He will take office in 1952.

Dr. N. Howell Furman, Russell Wellman Moore professor of chemistry in Princeton University, succeeded Dr. Ernest H. Volwiler, president of Abbott Laboratories, as head of the American Chemical Society on January 1 for the year 1951.

Ends Tenure as Kiwanis Pres.

John L. Lemmon, president of Lemmon Pharmacal Company and Professional Drugs, Inc. has completed his term as president of the Kiwanis Club in Sellersville, Penna.

Named Bristol Med. Director

Dr. Robert H. Broh-Kahn has been appointed medical director of Bristol Laboratories Inc., according to Frederic N. Schwartz, president.

SKF Honors First Research Director

Special memorial ceremonies were recently held for the late Dr. Walter G. Karr by his associates at Smith, Kline & French Laboratories. The company's first director of research laboratories, Dr. Karr died in 1946. A special plaque will be placed in the laboratories in his honor.

Attending special memorial ceremonies for the late Dr. Walter G. Karr at SKF Laboratories are, left to right, Dr. Glenn E. Ullyot, director of organic chemistry; C. Mahlon Kline, president of SKF Labs.; Dr. C. Wesler Scull, director of development research; Mrs. Wilda R. Karr, widow of Dr. Karr; and his two sons, Samuel, member of the laboratories; and Gerald, Naval Air Force lieutenant. Plaque of Dr. Karr, will be placed in the laboratories.

Supremacy in pharmaceutical and private formula manufacture entails a grave responsibility. At Strong Cobb & Co., we never forget that fact, and this sign over our employees' entrance is typical of our constant vigilance and care.

Since 1833 this search for perfection has been our aim. Today, you, like hundreds of other firms, can be assured of its benefits.

"How well we do our work may decide whether someone lives or dies"

Since your work is our work, you can be confident that your product is the finest modern production facilities can produce.

AMPIN®
Originators and Developers of the Ampin for Automatic, Subcutaneous and Intramuscular Injection.

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exclusively yours

A "D&O" ORIGINAL

For you* and *for your product alone
a distinctive fragrance with virtuosity and personality. D&O original scents are composed with irresistible subtleties to create olfactory impressions that coax and cajole attention to ***your product.*** Yet, surprisingly enough, ***D&O originals are modest in cost.*** D&O offers you more than 150 years' experience, vast research and manufacturing laboratories and a staff of master perfumers to help solve your perfuming problems. ***Consult D&O.***

D&O
ESTABLISHED 1798

DODGE & OLCOTT, INC.

180 Varick Street • New York 14, N.Y.

ATLANTA • BOSTON • CHICAGO • CINCINNATI • DALLAS • LOS ANGELES • PHILADELPHIA • ST. LOUIS • SAN FRANCISCO

ESSENTIAL OILS • AROMATIC CHEMICALS • PERFUME BASES • VANILLA • FLAVOR BASES

Sun Tube Buys West Coast Plant

Sun Tube Corporation has purchased a plant on the Pacific Coast to provide for future expansion in that area and to improve service to present customers. The building, which will be occupied in the near future, is located at Linden Ave. and Hillside Boulevard in South San Francisco on property which covers approximately 100,000 square feet.

Salesmen Ass'n Nominations

The nominating committee of the Salesmen's Association of the American Chemical Industry, Inc. has selected the following candidates for officers and members of the board of directors.

For president, Paul W. Hiller, Innis, Speiden & Co.; vice-president, Edward A. Bush, Bush Aromatics div. of the Dow Chemical Co., treasurer, Robert J. Milano, Millmaster Chemical Corp.; secretary, Warren F. Schumacher, J. T. Baker Chemical Co.; and for the board of directors, John F. Henry, Joseph Turner & Co.; James E. Spencer, Harshaw Chemical Company, Inc.; and John J. Butler, West Virginia Pulp & Paper Co.

Sharp & Dohme Promotes Knott

David V. Knott, Philadelphia branch manager of Sharp & Dohme, Inc., has been appointed chief of warehousing and traffic, according to Henry W. Gadsden, vice-president of production and engineering. He succeeds Charles A. Krieger.

DAVID V. KNOTT

Griffin & Selby Established

Harry L. Griffin, formerly general manager of manufacturing of the Nestle's Company, Inc., and Earle H. Selby, formerly vice-president for sales of American Home Foods, Inc., have established the management consulting firm of Griffin & Selby. The offices are located at 285 Madison Ave., New York.

Sun Tube's new plant in San Francisco which will be occupied shortly. Complete with the latest air-conditioning, it has glass walls and radiant heating.

Givaudan Aerosol Laboratory

Givaudan-Delawanna, Inc. has set up a special laboratory devoted exclusively to the formulation and testing of aerosol products, and has prepared a bulletin "Givaudan and the Aerosols," which describes the arrangement.

In the laboratory are found the apparatus, equipment, and gases needed for the manufacture of aerosol packages; a complete line of essential oils and synthetic aromatic chemicals; mixtures that have been successfully formulated for deodorizing or perfuming aerosols; solubilizing and emulsifying agents; and other materials required for the production, control, and testing of aerosols.

The bulletin is available upon request from Givaudan-Delawanna, Inc., 330 West 42nd St., New York 18.

Joins Chilcott Laboratories

Dr. Charles C. Scott has been added to the research staff of Chilcott Laboratories as director of Pharmacology.

DR. CHARLES C. SCOTT

Ungerer Transfers Bennett

Ira Bennett, formerly Ungerer & Company's special sales representative, was transferred to the Chicago office, 235 West Huron St., on January 1. He will cover certain acounts in the Chicago territory, as well as in the states of Ohio, Indiana and Michigan. Mr. Bennett is replacing J. R. Martin, former Ungerer representative in Chicago.

Thompson Wins Sulfa Patent Suit

Marvin R. Thompson, president of Marvin R. Thompson, Inc., recently won the lawsuit instituted against the Success Chemical Company, Inc. for infringement of U. S. Patent No. 2,460,-437 which pertained to a liquid mixture of sulfadiazine with sodium lactate.

The decree in the matter of Thompson Vs. Success Chemical Company, Inc. was signed by the Judge of the District Court of the United States for the Eastern District of New York on Friday, October 27. The Court granted an injunction against further manufacture of the infringed product by the defendants.

According to Dr. Thompson, Sharp & Dohme, Inc. is the only company licensed to manufacture sulfa products under the patent.

Givaudan Annual Christmas Dinner

Over 400 employees of Givaudan-Delawanna, Inc. attended the company's annual Christmas dinner and party on December 16 at the Swiss Chalet, Rochelle Park, N. J. The gathering was briefly addressed by Ernest R. Durrer, executive vice-president; Harold F. Duffy, treasurer; and Dr. Max Luthy, vice-president and plant manager.

Five employees who had completed twenty-five years of uninterrupted service at Givaudan were honored at the dinner and presented with gold watches. These included William Deegan, in charge of office work for the shipping department; Clare Gincel, credit manager; Paul Kopala, chemical operator; Kenneth Russel, in charge of the drum farm; and George Warren, assistant sales manager.

Leland Doan Married

Leland Ira Doan, president of the Dow Chemical Company, married Mildred Mellus, sister of Mr. and Mrs. George Hemmerick, on December 20 at Atherton, Calif.

To you and us:

"How good" is more important

than "how many"

It's to your advantage when we concentrate on fewer fine chemicals.

One of our specialties:

bromides

AMMONIUM • SODIUM • POTASSIUM

This company is *known* for *certain* pharmaceutical chemicals—less than a hundred in all.

When you order any one of these you can be sure it's "good." We've concentrated on *fewer* fine chemicals and we make them to predetermined standards of purity and uniformity—standards beyond those generally expected.

Let's consider Baker's Bromides. Experience and skill have made possible Bromides in the proper range of particle size to permit direct compression into tablet form without additional grinding operations.

At the same time the small particle size and extreme freedom from cloudiness provide quick, clear solubility in liquid preparations.

With today's need for watching costs while keeping quality high, you need fine chemicals that do several jobs well.

When you buy fine chemicals, consider the "extras" that Baker's concentration on fewer fine chemicals makes possible. Specify Baker's! Address: *Fine Chemical Division*, J. T. Baker Chemical Co., Phillipsburg, N. J.

Baker CHEMICAL

Baker Chemicals

REAGENT • FINE • INDUSTRIAL

Stutzman Appointed by SKF

Dr. J. W. Stutzman, former associate professor of Pharmacology at the Boston University School of Medicine, has joined the research staff of Smith, Kline & French Laboratories as head of the Pharmacology section. Serving under Dr. Edwin J. Fellows, SKF director of biological laboratories, he will be in charge of all pharmacological research activities.

DR. J. W. STUTZMAN

Wins Bristol-Myers Trophy

Bert Moorhead of Florasynth Laboratories (Canada, Ltd.) won the 1950 Bristol-Myers Eastern Division Golf Trophy, having defeated Frank Badger of Palmer Ltd. in the final match.

Fritzsche Annual Meeting

Fritzsche Brothers, Inc. held its annual December meeting of executives and sales personnel in the Hotel New Yorker and featured motion pictures, stereopticon slides, and mounted displays in a move toward greater visual presentation. During the opening day President F. H. Leonhardt delivered an address of welcome, followed by John H. Montgomer, vice-president; John L. Cassullo, treasurer; D. A. Neary, assistant secretary; and Fred Leonhardt, Jr., vice-president, who spoke on sales, management and administration.

The second day of the meeting was devoted to discussions by the perfume division, with K. W. Tracy, George Ammersbach and Ernest Lawson participating. In a similar meeting Dr. E. H. Hamann, in charge of flavor research, and Ray Thompson, on behalf of Robert Krone, division head, discussed various problems in flavoring.

During the final afternoon session, colored motion pictures were presented which showed the part played by advertising in the sales scheme. This was followed by a resume of the market situation by vice-president H. P. Wesemann.

Heads Penick Div. Essential Oils

E. G. Allison has been appointed manager of the essential oil division of S. B. Penick & Co. He has been associated with the company over twenty years, having served as special representative in the mid-west and as one of the company's directors of sales. Mr. Allison has actually been in charge of the essential oil division for several months.

E. G. ALLISON

Schering Enlarges Field Staff

Schering Corporation recently added eighteen new representatives to its professional service staff, according to Francis C. Brown, president. Fifteen of the men have been assigned to the domestic sales division for service in various territories throughout the country. The remaining three representatives have completed the training course of the international division and are now serving in Puerto Rico and Canada.

Dr. Major To Get Research Award

Dr. Randolph T. Major, vice-president and scientific director of Merck & Co., has been named recipient of the 1951 medal of the Industrial Research Institute for "outstanding accomplishment in leadership or management of industrial research which contributes broadly to the development of industry or the public welfare." Official presentation of the award, according to Dr. C. F. Rassweller, president of the Institute, will be made at the annual Industrial Research Institute meeting in Washington, D. C. in May of this year.

Dr. Major was chosen to receive the award for his direction of the Merck research organization in the field of vitamins; in the development of the antibiotics, penicillin and streptomycin; and in many of the sulfa drugs.

Kenly Named Sales Mgr. N. J. Zinc

Robert G. Kenly has been appointed general sales manager of the New Jersey Zinc Company and the New Jersey Zinc Sales Company. He succeeds Ralph M. Neumann who retired, after forty-four years of service, on December 31, 1950.

Becomes Pres. of Personal Prods.

George A. Murphy, formerly executive vice-president of Personal Products Corp., has been named president of the company, succeeding Paige D. L'Hommedieu, who has been elected chairman of the board. Mr. L'Hommedieu has also been appointed to the executive committee of the parent company, Johnson & Johnson.

Representatives and executives attending the recent annual sales conference of Fritzsche Brothers, Inc., at the Hotel New Yorker. Left to right are Bob Montgomer, Phila. office representative; George Ammersbach, in charge of perfume research laboratory; Norman Jones and Frank Pond, New York; Hans P. Wesemann, vice-president; and Gus Wohlfort, comptroller.

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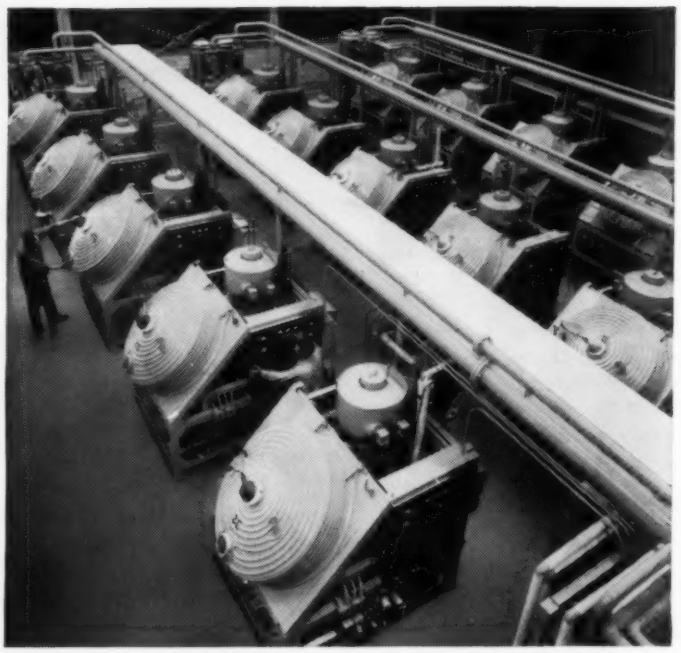

These banks of DPi's unique molecular stills separate from fish liver oils the blandest and most stable of natural vitamin A concentrates.

WHEN you need the best in vitamin A, you have but one thing to remember. Simply this: Whatever your vitamin A requirements—natural *or* synthetic—*deal with DPi!*

In natural form—DPi Distilled Vitamin A Concentrate. DPi's molecularly distilled vitamin A is the finest obtainable for use in pharmaceutical or food products. This is a result of DPi's world-wide sources for natural fish liver oils—and a modern plant for continuous, large-scale refining and molecular distillation. *Here rigid quality controls assure you that there is no concentrate from natural materials more taste-free and stable.*

In synthetic form—Myvax 16 Synthetic Vitamin A Palmitate. In 1948 DPi offered on the American market the first synthetic vitamin A available in commercial quantities. Since then, it has been in continuous successful production. It has a pleasant but exceedingly faint taste and odor. Ideal for use in high-potency preparations.

To help you. As producers of the best in natural and synthetic vitamin A, we like to see it traded as an accurately characterized, precisely measured commodity. A long step forward in that direction, we believe, is the new assay method for vitamin A in the recently issued Fourteenth Revision of the United States Pharmacopeia. So to help all vitamin A buyers understand completely the background and implications of this method, we have issued a booklet called "U.S.P. XIV and the Vitamin A Business."

For your copy, or for the latest quotations on either natural or synthetic vitamin A, write, wire, or call ***Distillation Products Industries,*** 791 Ridge Road West, Rochester 3, N. Y. (Division of Eastman Kodak Company). Sales offices: 570 Lexington Avenue, New York 22, N. Y. • 135 South LaSalle Street, Chicago 3, Ill. • Gillies & Loughlin, Los Angeles and San Francisco • Charles Albert Smith, Ltd., Montreal and Toronto.

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Breon Sales Managers Meet

District sales managers of the George A. Breon Company met at the Hotel McAlpin, New York, on January 2, 3, and 4, and spent the following day at the Sterling-Winthrop Research Institute in Rensselaer, N. Y. C. B. Drolsbaugh, vice-president in charge of sales, presided over the sessions.

Guests at a banquet on January 4 included J. G. Jordan, president of the company; James Hill, Jr., president of Sterling Drug Inc.; Dr. J. Mark Hiebert, executive vice-president; and John Mulhern, comptroller; and Dr. Theodore G. Klumpp, president of Winthrop-Stearns Inc.

District managers attending were G. L. DeHaven, Seattle; E. S. Peterson, Monrovia, Cal.; S. A. Planchard, Dallas; C. A. Johnson, Kansas City; L. T. Hunt, Columbus; B. R. Hedges, Winnetka, Ill.; L. J. Clark, Richmond; T. E. Landry, Atlanta; and S. W. Smith, Philadelphia.

Ironized Yeast Plant Transferred

The manufacture of Ironized Yeast was transferred from the Atlanta Plant of the Centaur-Caldwell division, Sterling Drug Inc., to the company's facilities at Rahway, N. J. The change became effective on January first.

The Atlanta plant has been sold, according to Stanley I. Clark, vice-president in charge, who stated that the move was dictated by considerations of operating efficiency as well as by anticipation of future requirements.

Appointed by Sharp & Dohme

Charles A. Krieger, chief of warehousing and traffic, has been appointed administrative assistant to the director of purchases at Sharp & Dohme, Inc., according to H. B. Price, director of the division.

CHARLES A. KRIEGER

New officers of CIBS who were installed at annual Xmas cocktail party on December 16. Left to right are Steve Capkovitz, Prince Matchabelli, as a director; Ray McCue, Albert Verley & Co., committee chairman; George Schumacher, Chesebrough, president; Bob Williams, Avon Allied Prods., Inc., 1st. vice-president; Henry Budd, Ungerer & Co., 2nd vice-president; Harold Anderson, H. Kohnstamm & Co., recording secretary; Dave Warner, Reinitz Soap Co., treasurer; and Larry Carter, Ogilvie Sisters, director. Not shown in picture is Paul Alexander, DRUG AND COSMETIC INDUSTRY, director.

CSC Named Alcohol Agent

Commercial Solvents Corporation has been named agent for the Reconstruction Finance Corporation to expedite the shipment of about 106,000,000 gallons of ethyl alcohol from France to the United States. Delivery is to be made during 1951. Arrangements for purchasing this material by the United States Government from that of France were completed in October of last year.

This alcohol will be used in the manufacture of butadiene to meet the demands of the accelerated synthetic rubber program.

Becomes Bristol-Myers Midwest Mgr.

Bruce W. Mansfield, formerly assistant manager of Bristol-Myers' western branch in San Francisco, has been named manager of the Company's midwestern branch with headquarters in Chicago, according to Joseph P. Hardie, vice-president in charge of sales.

BRUCE W. MANSFIELD

Vitamin A Estimation by USP XIV

A limited number of copies of an unpublished paper entitled "Current Experience in the Estimation of Vitamin A by the USP XIV Procedure" are available for distribution upon receipt of a letterhead request addressed to Food Research Laboratories, Inc., 48-14 Thirty-third St., Long Island City 1, N. Y. This release, according to Dr. Bernard L. Oser, director, is a summary of a paper read before the Animal Nutrition Research Council in Washington in October. The paper is under the joint authorship of Kenneth Morgareidge, Milton Blitz, John R. Foy and James P. Aaron, Jr. of Food Research Laboratories, Inc. and Nopco Chemical Company, Inc.

D & O Expands Headquarters

Dodge & Olcott, Inc. has expanded its headquarters at 180 Varick St., New York, by 20,000 square feet to include the fourteenth floor. This has resulted from the post-war growth of all departments of the company.

Now located on the fourteenth floor are the Vanilla Department, a large modern control laboratory, new perfume laboratories, and the accounting department. The vanilla department contains a large storage area and new facilities for weighing, grading and repacking the beans. The control laboratory is three times as large as the former one and contains detailed records with samples of all essential oils and aromatic chemicals shipped to customers.

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Under your own label, you can now offer your customers 3 popular and highly effective ORAL forms of Heyden Penicillin, in a wide range of dosages to meet the exacting requirements of the medical and hospital fields.

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Remember!—when you standardize on Heyden antibiotics, both you and your trade are assured of superior quality, uniformity and potency—regardless of the form, dosages or quantity you purchase.

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Vials: Crystalline Penicillin G Potassium or Sodium; Crystalline Procaine Penicillin G in Sesame Oil with 2% Aluminum Monostearate w/v (cartridges, single- and multiple-dose vials) (also available in fortified form).

STREPTOMYCIN

Vials: Crystalline Dihydrostreptomycin Sulfate (1-gm. and 5-gm.).

Dihydrostreptomycin Sulfate (1-gm. and 5-gm.).

Streptomycin Sulfate (1-gm. and 5-gm.).

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100 Years for W. J. Bush

W. J. Bush & Co., Ltd., is celebrating its one-hundredth anniversary, and has published a book setting forth the history of the company. Founded in 1851 in Bishopgate, London by 22 year old William John Bush, the establishment developed along lines indicated by its Founder's realization of the importance of the volatile constituents of herbs and spices. The preparation of tinctures and extracts, the steam distillation of the volatile constituents of herbs, spices and woods, the production of many ethers, esters and other compounds—all these activities merged into the mainstream which originated and brought about the development of the flavoring essence and perfume industries.

Upon the death of the Founder in 1889, the eldest of six sons to be come associated with the company, William Ernest Bush, headed the firm, and under his direction a factory for production of Sicilian oils was set up at Mili, Messina. Under his direction, also, the business was expanded in 1893 to Melbourne, Australia, and in 1899 to the United States in which a separate company was founded and a factory erected at Linden, N. J. William Ernest Bush, who died in 1903 at the age of 42 as the result of a railroad accident, was succeeded by James Mortimer Bush, the third son of the Founder. Under his direction, in 1906 premises in Grasse were obtained for treatment of floral products of the Alpes Maritime, and in 1912, there was established W. J. Bush & Co., (Canada) Ltd. with office and factory in Montreal.

Following World War I, the company pioneered in many important chemicals such as vanillin, benzyl alcohol, benzyl chloride, terpineol, chloroform, geraniol, heliotropine, nicotine, citral, courmarin, salicylic acid, and acetylsalicylic acid. Also, at that time, overseas activities were expanded, particularly the citrus products factory at National City, California. In 1931, a large factory, warehouse and offices were erected in Johannesberg, South Africa, and later a branch in Cape Town.

Before the outbreak of hostilities in 1939 opening World War II, the company had done a great deal towards the development of penicillin on the nutrient side in the development of the sulfonamides, Bush specialized in acetanilide, the company had done much also in the development of insecticides; and was particularly well equipped to undertake large-scale production of DDT.

James Mortimer Bush died in 1941 at the age of 79. He was succeeded by the present head of the company, Dr. Percy Claude Cameron Isherwood, Ph. D., F. R. I. C., O. B. E., who this year celebrates his golden anniversary with the company. He was engaged in 1901 as chemist in charge of the Ash Grove and Mitcham factories.

Richard Righton Webb, who manages the company in the United States, and is treasurer of the American company and a director of the parent concern, is a grandson of the founder.

With Whittaker for 60 Years

Patrick J. Flynn was honored recently at a testimonial dinner by officers and employees of Whittaker, Clark & Daniels, Inc. in recognition of his sixty years of service with the company. During the celebration, he was presented a gold watch by John A. Franklin, treasurer, on behalf of Whittaker, Clark & Daniels, Inc.

Eighty-seven years of age, Mr. Flynn is active in handling the transportation and trucking for the company. He joined Whittaker in 1890 at the age of 27.

R. H. REITEN

Reiten Named Sharp & Dohme Supervisor

R. H. Reiten has been appointed sales supervisor in the Minneapolis district for Sharp & Dohme, Inc., according to C. B. Pyle, director of field operations.

Oscar Ewing to Address DCAT

Oscar R. Ewing, Federal Security Administrator, will address a luncheon meeting of the DCAT on Friday, January 26, at the Hotel Astor. He will discuss the function of the Administrator as Claimant Agency for health supplies under the Defense Production Act of 1950 and the N. P. A.

Syntomatic Affiliated with Florasynth

William Lakritz, president of Florasynth Laboratories, Inc. and Dr. Victor Fourman, president of Syntomatic Corporation, recently issued a joint statement announcing the affiliation of the two concerns. The development was attributed to the continuous increase in the activity of the flavor division of Florasynth, with resulting increases in sales, necessitating expansion of the research and production facilities.

Dr. Fourman will direct the perfume research for both Syntomatic and Florasynth, while production and flavor research will be under the supervision of David E. Lakritz, chief chemist of Florasynth. Irving Bennett will continue as vice-president and director in charge of sales for Syntomatic.

WILLIAM LAKRITZ

DR. VICTOR FOURMAN

New Whittaker Catalogues

Whittaker, Clark & Daniels, Inc. is distributing a new book on Talc which contains a section on Uses, another on Data, and one on Specialties. The company is also distributing a catalogue on "Whittaker Metallic Soaps," including tables which show the analysis, physical properties and solubility of each product.

Distribution of these publications is free but is restricted to industrial manufacturers.

JOHN L. HAMMER JR.

Keyes Resigns from Heyden

Dr. D. B. Keyes resigned as vice-president from Heyden Chemical Corporation December 31 but will continue in the capacity of a special consultant. He is also a director of the company.

Appointed by Bristol-Myers

W. E. Crutchfield Jr. has been appointed assistant medical director of Bristol-Myers products division, according to Robert B. Brown, president of that division. He joined Bristol-Myers in 1945.

Sterling Shifts Neff to S. Africa

Carroll F. Neff has been appointed manager of plant operations in Durban, South Africa for four subsidiaries of Sterling Drug Inc., according to James Hill, Jr., president. He has been manager of the company's ironized yeast plant in Atlanta, Ga. since 1938 and will leave shortly for his foreign assignment.

Robertet Brochure

P. Robertet & Cie., Grasse, France, has just issued a complete brochure on all its products. The booklet can be obtained by contacting P. Robertet, Inc., 125 East 23rd. St., New York 10.

Bush Aromatics Changes Address

Bush Aromatics, division of Dow Chemical Co., moved its sales office on January 1 from 136 Liberty St., New York, to 629 Grove St., Jersey City 2, N. J. The telephone number is WOrth 2-6557.

Appointed by Norwich Pharmacal

Raymond A. Kaiser has been appointed assistant manager of the west central division of the Norwich Pharmacal Company, according to Melvin C. Eaton, president. He was formerly district manager in the Michigan, Indiana and metropolitan Chicago area.

SKF Names Three V.P.'s

Three new vice-presidents have been named to Smith, Kline & French Laboratories by the board of directors: John L. Hammer Jr., formerly sales manager; Addison S. Ellis, formerly assistant to the vice-president; and F. M. Rivinus Jr. who is also president of the SKF foreign subsidiaries.

Mr. Hammer joined the company in 1936 as administrative assistant, later becoming assistant to the vice-president, and then sales manager. Mr. Ellis has been with SKF for 14 years, starting as office manager, and later as personnel manager and market research director, and assistant to the vice-president in 1947. Mr. Rivinus has been with the company since 1938, becoming executive-vice-president of the foreign subsidiaries in 1946 and president of them in 1950.

ADDISON S. ELLIS

Thomas Appointed by Owens-Ill.

Claude W. Thomas, Jr. has been appointed eastern regional merchandising manager of the glass container division of the Owens-Illinois Glass Company, with headquarters in New York. He was formerly sales manager of Modern Food Sales Company.

Appointed by Helene Curtis

Leslie A. Sauers, formerly national field sales manager of the Pepsodent division of Lever Brothers, has been added to the executive staff of Helene Curtis Industries, Inc. He will assist G. M. Factor, vice-president in charge of the toilet goods division.

Dr. Coghill Elected to Fellowship

Dr. Robert D. Coghill, director of research at Abbott Laboratories, was elected to fellowship in the New York Academy of Sciences at the Academy's annual meeting in December. He was one of 106 distinguished scientists elected to that honor.

F. M. RIVINUS, JR.

To Act Against Reader's Digest

Dolcin Corporation is planning to take immediate legal action against Reader's Digest because of an article which appeared in the January 1951, issue entitled "Those Million-Dollar Aspirins." The company claims that the publication grouped Dolcin Tablets with nine other products in an article which resulted "in a conglomeration of misinformation, half-truths, and some facts which have no application whatsoever to Dolcin Corporation or its product."

Dolcin further declares that the reference and comment of the magazine to the clinical tests made upon 396 arthritic patients fails to disclose essential facts. The results of these clinical tests were published in the October 1947, issue of The Ohio State Medical Journal. Much of the article, Dolcin points out, speaks of the inherent and potential dangers of aspirin. The company refutes this claims by stating that aspirin has been sold over the counter for fifty years without prescription and without any requirements or cautions against potential risks enumerated in the Reader's Digest article.

Trend in Pharmaceuticals

Di Cyan & Brown has reviewed the trend in pharmaceuticals for the last decade in the January issue of the Monthly Bulletin of Di Cyan & Brown. The article states that about 60 per cent of the pharmaceutical products sold in 1950 were unknown in 1939.

Apex Chemical 50th Anniversary

The Apex Chemical Co., Inc., with sales office in New York and plant in Elizabethport, N. J., is celebrating its 50th anniversary. A dinner was given in honor of the occasion on December 16 at the Hotel New Yorker, with Hugo Helburn, founder and treasurer as guest of honor. Herman Rothstein, president, acted as master of ceremonies.

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- SUNAROMES are economical to use.
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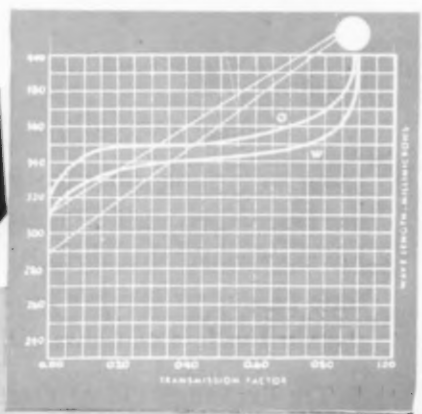

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Jean Graham, Inc. Established

Mr. and Mrs. John Graham and Mr. and Mrs. Fred Quance, all of Florida, recently established Jean Graham, Inc., in Orlando. Mrs. Quance is the sister of John Graham, who resigned from Angelique, Inc., to set up the new company. Jean Graham was formerly a representative of Elizabeth Arden. Fred Quance has been a sales executive in the Auburn Rubber Co. at Auburn, Ind., and his wife, Erthenia Graham Quance, was formerly dermatologist in the Massachusetts General Hospital at Boston. Dr. John Graham Sr., dentist, will join the organization in the near future to handle production of a new dentifrice.

The company which is temporarily situated at 3390 Edgewater Drive, will announce shortly the location of the permanent headquarters where an elaborate beauty salon, display rooms and manufacturing facilities can be combined.

Products of the company will include cleansing, refreshing, smoothing and makeup preparations, bath items and perfumes for women, as well as a line of toiletries for men.

Miss Fourman Married

Dr. Victor G. Fourman, well known in essential oil circles, and his wife, have announced the marriage of their daughter, Nonna, to Lee I. Hammer, which took place December 23 in New York. Mr. Hammer graduated from Cornell College and is now attending the Cornell University Medical School.

Soap Patent Opened for Licensing

Sindar Corporation has announced that it will issue licenses at reasonable royalty rates under U. S. Patent No. 2,535,077, relating to germicidal soaps. The patent which was issued to Sindar on December 26, 1950, covers phenolic germicides such as hexachlorophene, called G-11 by Sindar.

Leguay Named Sales Mgr.

Jean Leguay has been appointed general sales manager of Jacqueline Cochran, Inc., Parfums Charbert, Inc., and Nina Ricci Perfumes of Paris, according to Jacqueline Cochran, president, and William M. Holmes, chairman of the board.

Ethyl Hobson will assume additional duties in connection with Parfums Charbert, Inc. and Nina Ricci Perfumes, as well as continuing in her present position as sales manager of Jacqueline Cochran, Inc.

Burroughs Wellcome Appointments

William A. Schneider was appointed treasurer and Arthur H. Clark, comptroller, of Burroughs Wellcome & Co., Inc., at a recent board meeting, according to William N. Creasy president and general manager.

WILLIAM A. SCHNEIDER

ARTHUR H. CLARK

USP and NF Reference Guide

Mallinckrodt Chemical Works has prepared a handy reference guide for users of the USP XIV and NF IX. This booklet indicates the significant changes from previous editions in products, titles, tests, specifications, and miscellaneous requirements. It contains a complete list of products admitted to the USP XIV and NF IX, and in addition lists all products that appeared in the USP XII and NF VIII but were not admitted to the new editions. It also indicates which products were transferred from the USP to the NF, and vice versa.

William Brown Bell

William Brown Bell, 71, president of American Cyanamid Company, died December 20 of a heart attack while on a business trip at Marrakeech, French Morocco.

He practiced law with the firm of Guthrie, Crawath, Henderson and Derersforff and during World War I participated in the building of a government nitrate plant at Muscle Shoals, Ala. He became president of American Cyanamid in 1922. Within ten years, he added more than three dozen new companies to the confederation, including Lederle Laboratories and Calco Chemical Company and by 1939 had raised its annual gross sales from $5,000,000 to $70,000,000.

In 1934 Mr. Bell won the Chemical Industry's Medal for distinguished economic service to the chemical industry and during the early depression years served as chairman of the board and president of the Manufacturing Chemists Association and the Chemical Alliance. He was awarded the honorary degree of Doctor of Science in 1949 by the Philadelphia College of Pharmacy and Science and was a member of the board of managers of Haverford College.

Maxwell W. Becton

Maxwell W. Becton, chairman of the board of Becton, Dickinson & Co., manufacturers of surgical instruments, died January 2 at his home in Rutherford, N. J. He was 83 years old.

Henry E. Girard

Henry E. Girard, perfumer at E. I. du Pont de Nemours & Co., died of a heart attack December 14 at his home in Metuchen, N. J. Starting as a chemist in one of the laboratories, Mr. Girard had been associated with du Pont for over 30 years and had been a perfumer for the last 20 years.

Mrs. Ralph Sachs

Mrs. Ralph Sachs, partner in the Sachs Manufacturing Company, died December 20 at the age of 47. She is survived by her husband, Ralph Sachs; a son, Melvin; a grandchild; four sisters, Mrs. B. Levin, Mrs. Anne Haberman, Mrs. Joseph Cherry, and Phyllis Mitnick; and brother, Albert Mitnick.

Dr. Harvey A. Seil

Dr. Harvey A. Seil, president from 1921 until his retirement in 1947 of Seil, Putt & Rusby, consulting and analytical chemists, New York, died January 5, in Paterson (N. J.) General Hospital after a brief illness, at the age of 68. His wife, the former Edna Wagstaff, survives him.

Dr. J. Murray Scott

Dr. J. Murray Scott, 45, medical director of Sharp & Dohme, Inc., died December 29 after an illness of four months. He had been associated with the company since 1949.

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Balance and

Consumer Appeal?

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this is ISCO...

The photograph which makes up the background for this page is an aerial shot of the Isco Chemical Division plant at Niagara Falls, N. Y. Here, Innis, Speiden & Co., manufactures for industry such basic products as Carbonate of Potash, Caustic Potash, Ferric Chloride, Liquid Chlorine, Calcium Hypochlorite Solution and Chlorpicrin.

It is in this plant also, that the company's Insecticide Division produces Larvacide,* the versatile tear gas fumigant that sterilizes greenhouse soil, kills rats and mice and eliminates insect pests in granaries, warehouses, etc. Innis, Speiden's Iscomist* Aerosol Bombs for insect control in greenhouse, industry and agriculture are also formulated and filled in the Niagara Falls plant.

Innis, Speiden's Gums and Waxes are refined and processed in our Jersey City, N. J., plant. If our experience with chemicals, gums, waxes and insecticides can help you, please let us know. We've been known for service since 1816.

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MANAGEMENT FORUM

By Francis Chilson
Industrial Consultant

Special Equipment Development

It is a curious paradox that an industry which spends, often abortively, millions of dollars annually on research will balk at spending a few thousand dollars in developing a new machine unless the machine maker guarantees its performance and price. What's the difference between research in the hope of developing a new product and research in the hope of developing a new machine? Both are research projects and should be regarded as such. You wouldn't expect to go to an outside research laboratory and expect it to finance an extensive research project on a "no success no pay basis;" why should you therefore expect a machine manufacturer to develop a special machine for you, exclusively, a machine from which, even if he is successful, he can expect to make but a small profit and upon which, more than likely, he will lose the tail if not his entire shirt? Such a practice is not fair; it's not even moral.

Some of you will snicker and say I have been party to a number of such deals myself. That's true. I admit it and I repent sincerely. But I'll never be a party to any *such* deal again for any client whatever. Fortunately —for my clients—the majority of such deals to which I have been a party have been successful but at long last, looking back over the years, I doubt if there has been a single case where such projects have been profitable to the machine people who were suckers enough to undertake them.

No manufacturer of equipment, if he knows his costs, can undertake the development of a special machine at a fixed price on a guaranteed performance basis and expect to make a reasonable profit from his investment of time and money. There are too many unknowns which cannot be anticipated on a drawing board. There is still a lot of art and empiricism in engineering and anyone who doesn't think so is not really an experienced engineer. Also there are too many variables in materials, especially packaging materials, and this is particularly true among different suppliers of the same material. I have known clients to switch sources of supply in the middle of a machine development program without any notice whatever to the builder of the special machine and then raise particular hell when the machine failed to work properly under what amounted to a different set of conditions from those on which the machine design was based. Sure, machines should be adaptable and flexible, and they can be made so. But who the hell is to pay for the adaptations, which sometimes take weeks and months after the special machine has been built and tried out?

The production floor is the final testing place for any piece of equipment and the conditions of the production floor cannot be reproduced fully in any machine builder's plant whatever. I have seen special production machines rejected, not because they were wrong in conception, in principle or construction, but simply because they lacked the refinement which only extensive production testing can give, and the people who initiated the projects refused to cooperate by contributing the time and advice necessary to make the refinements. That's not fair.

I realize of course that some machine builders have had so much experience building equipment that they know it all and will not listen to the suggestions of production men who do know all the little tricky things which occur in dealing with some products in some plants, and never, indeed, occur anywhere else even in dealing with identical products. But such cases are in the minority. Most machine builders want to learn all they can before committing themselves to a special machine project, and it is sometimes difficult to gain this fundamental knowledge because many plant people are excessively secretive or they take it for granted that the machine builder knows far more than he actually does about the peculiarities of his product.

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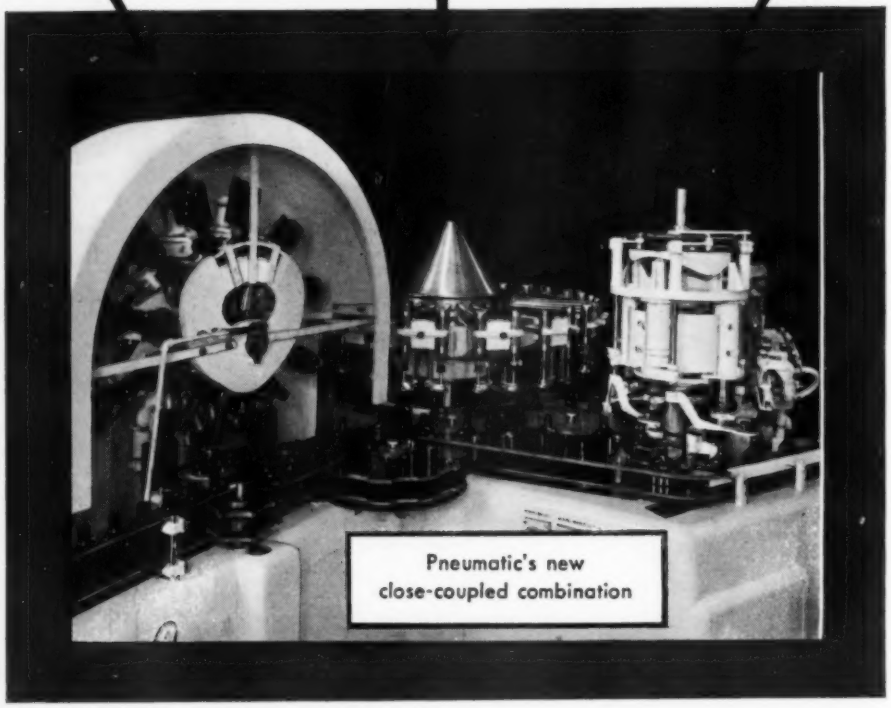

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PACKAGING AND BOTTLING MACHINERY

I am not, you understand, talking about standard equipment which may merely require some little special adjustment. I am talking only about the special machine built for your process or your product. That's research and it should be regarded as such. Other industries set aside part of their research budgets for production research and it's about time we woke up. We are indeed very far behind other industries in our concepts of production.

Austerity be Damned

We are being told by our emissaries in Washington to prepare for a long period of austerity. The columnists have taken up the hue and cry and say that because we may have to stand to arms for half a century we shall know austerity as bad or worse than England knew during the past ten years. We're not England. And we have an answer to austerity and that is—production. Increased, multiplied, overwhelming production. In World War II we fought two major wars half a world away from each other, at the same time supplying and supporting our allies. And we did not live austerely. We doubled our production. We're still increasing it (in spite of the post-war Washington predictions that all manner of cut-backs would immediately set in) and we can double and triple it again. We've got most of the raw materials and what we lack we can make as we did rubber in the last war. All we need is the will to do it. We can fight Russia; we can support our allies and we need not accept austerity unless we wish to. We can do our predestined job in the world and still maintain our high standards of living if we really want to and are willing to work and cooperate for that ideal.

During the last war, I had, because of my business, an opportunity to watch the production build up in the drug and cosmetic industry and in several unrelated industries as well. I had a hand in it. I had both hands and both feet in it. And I tell you this: there never was a time when the drug and cosmetic industry reached anywhere near its maximum capacity in spite of the fact that on the whole its capacity tripled. There never was a time when all equipment and all departments were busy all the time.

During the war the majority of our plants never ran a full double shift and few ran triple shifts except in a few departments which by their nature had to be operated on a twenty-four hour schedule anyway.

Here's what we can do if we want to: (Incidentally I suggested this plan to the WPB during the last war but got nowhere with it. It was too simple.)

Let us establish at once a national group of the most experienced production men in the industry. One should be appointed national director for the industry. Reporting to him would be regional directors who know and are known in their territories.

Let's take a complete plant inventory of all space, personnel and potential personnel, equipment and facilities in the entire industry.

Let's determine from this data how much capacity is required to service civil requirements.

Then let's pool all government contracts of every kind whatever and allot them in accord with capacity on a twenty-four hour basis.

Let's run this industry as if it were a single plant and we will produce on a scale few have ever dreamed of. And we can do it without a lot of new buildings and without a lot of new equipment.

During the last war some firms had more contracts than they could handle. Some had contracts for which they had inadequate equipment. Some had contracts for which they had no equipment at all. And all through the industry it was the rule, not the exception, that specific departments were under-capacity or actually idle part of the time. Some plants had contracts even though they were too inefficient to handle even their own business on anything like a business-like basis.

We handled the production problem of the last war on a piecemeal basis. We scrambled for business and for government contracts, in many cases only to maintain our working forces or to get equipment priorities. What could we do if we organized the job on a national scale and started to use all our productive power all the time?

I was associated with plants during the past war that doubled, tripled, quadrupled, quintupled production without any additional building facilities and even in these there was idle time in some departments.

The simple fact is we do not know what we can produce as a total industry simply because we have never been forced to find out.

I am fully aware that the government requires competitive bidding. There are ways of handling that without interfering with an all-out effort. I am fully aware that rivalries and petty jealousies and prejudice and pride will have to be overcome. If we fail to overcome them; if we fail to do the job I know we all can do, we'll suffer austerities such as we have never known. And if in the end we lose the shooting war, pride and prejudice; rivalry and jealously will mean little to Joe Stalin.

The following information is supplied by manufacturers of the equipment described and claims made below by these manufacturers are passed along for what they are worth. Presentation of such notice in this department is not to be taken as endorsement of the claims or of the equipment.

Oscillating Granulator

F. J. Stokes Machine Company, Philadelphia, announces a new oscillating granulator of welded stainless steel construction. It is designed so that leakage of material is practically eliminated. The gearing is of high strength and the entire drive mechanism including worm, worm gear, crank, segment and pinion is completely sealed in oil, which greatly extends the normal life of these parts. Another important feature of the 43B granulator is the motor protection against dust and dirt.

Good Idea

Popcorn has been used by Winthrop-Stearns Inc. as a protective packing material.

The tests were described by Hugo Vogel, director of purchasing for Winthrop-Stearns Inc., pharmaceutical manufacturers, as "sufficient to convince the most exacting purchasing agent that popcorn is an excellent material for protecting fragile articles in shipment, particularly drugs and medicines in glass bottles."

The idea of using popcorn for this purpose was originated by Albert R. Rausch, traffic manager of the company. It received national attention when it was first publicly shown by Harold Frick of Mr. Rausch's staff at the Society of Industrial Packaging Materials and Handling Exposition in Philadelphia in October.

Most dramatic of the latest tests conducted by Mr. Rausch consisted of throwing two representative glass shipments in double-faced corrugated paperboard containers from the roof of the Winthrop-Stearns warehouse to the asphalt pavement 60 feet below. One shipment was packed with 10 ounces of popcorn. The other used the conventional shredded kraft paper, with 24 ounces of the material being required. Both cartons contained the same items: a 4 ounce bottle of Neo-Synephrine Hydrochloride; two bottles of Korotrin, a hormone product, each with delicate glass ampuls for diluent; Pluravit Drops, with accompanying glass dropper; a 4-ounce bottle of Zephiran Chloride; a bottle of 100 tablets of Veronal; and a bottle of 100 tablets of Torantil.

Opened and inspected after the drop, not one of the bottles in the popcorn packed package was broken; whereas in the carton protected with shredded paper, the Zephiran Chloride and Torantil tablet bottles were smashed to tiny fragments.

Mr. Rausch pointed out that a larger carton was required for the same number of items packed with paper. It measured 11 by 9¼ by 6½ inches, while the carton protected with popcorn filling measured 10½ by 7 by 5½ inches.

Previous tests have included parcel post shipments from Rensselaer to Atlanta, Ga., to New York City, and to other points, all made without damage to the contents. For comparative purposes, two shipments were made the same day by parcel post of a gallon bottle of liquid to a druggist in Gloversville, N. Y. One was protected by popcorn, the other by standard shredded paper. In postage and carton cost, the popcorn packed parcel represented a saving of 58 cents.

Packages protected with popcorn have been thrown into the air to land on the concrete loading platform of the warehouse without damage, whereas the contents of paper protected cartons have broken in a fall from the packing bench.

Winthrop-Stearns is ready but has not yet adapted the popcorn idea in its own shipping deparment. Official approval of the United States Post Office Department is awaited. The Post Office has asked for "comparative tests conducted by a commercial testing laboratory."

An official laboratory of the United States Department of Agriculture has written Mr. Rausch:

"We have inspected the sample package with a great deal of interest and subjected it to the following exploratory tests: The sample package, as received, was dropped 20 times from a height of 6 feet and three times from 15 feet to a concrete floor. It was also thrown three times with considerable force against a concrete wall. The sample pack was next sprayed with water and stored for 24 hours under high humidity conditions prior to 10 additional drops from a height of 7 feet. This rough handling did not cause the breakage of a bottle or leakage of the water from the bottle."

Questions have been raised as to popcorn attracting rodents or vermin. As an answer, Mr. Rausch displays a paper bag of popcorn which for three months now he has kept on the floor beside his desk in the warehouse and which has not been touched by mice or infected in any way. He points out that no butter or grease or salt is used on the popcorn in packaging and that it has no odor to attract rodents.

Many advantages of popcorn over other materials are cited by Mr. Rausch, including: (1) Economy: in cost of materials, shipping charges, reduced size of cartons needed, elimination of breakage, prevention of loss of items from packages at destination, such as sometimes happens when excelsior, shredded paper, or other materials are used: (2) elimination of fire hazards; (3) the dust-free and cleanly aspect of popcorn; (4) ease of handling; and (5) the fact that corn kernels for popcorn are readily available at low cost, with no foreseeable shortages.

In a paper he has prepared on the use of popcorn in packaging, Mr. Rausch has stated:

"The cushioning and resilient qualities of popcorn make it an ideal packing material, light in weight to effect savings in transportation charges, yet it costs no more than shredded paper. An 8-ounce bottle surrounded by 3 ounces of popcorn and a gallon bottle surrounded by 1¼ pounds, each in a double-faced corrugated carton were found to be indestructible when dropped from a height of 10 feet to a concrete floor.

"Three ounces of popcorn have been shown by tests to provide better protection than one pound of shredded paper. This means less weight, less transportation charges. Shipments now moving by Railway Express because of value or fragility can be sent Parcel Post at greater savings and with faster delivery. Even larger savings may be realized on air shipments. A gross weight of a 10 pound package can be reduced to 8 ounces by use of popcorn, reducing Air Parcel Post charges from $8 to $6.40, a savings of $1.60."

Mr. Rausch has worked out a method for handling the popped corn in the shipping department, where now he has seven two-men shipping benches and two end to end. Popping the corn in an outside building, he would transfer it to the shipping department in 25-pound fiber drums, each fitted with a tight lid. When brought to the shipping department, the regular tight cover would be removed, and other cover with two

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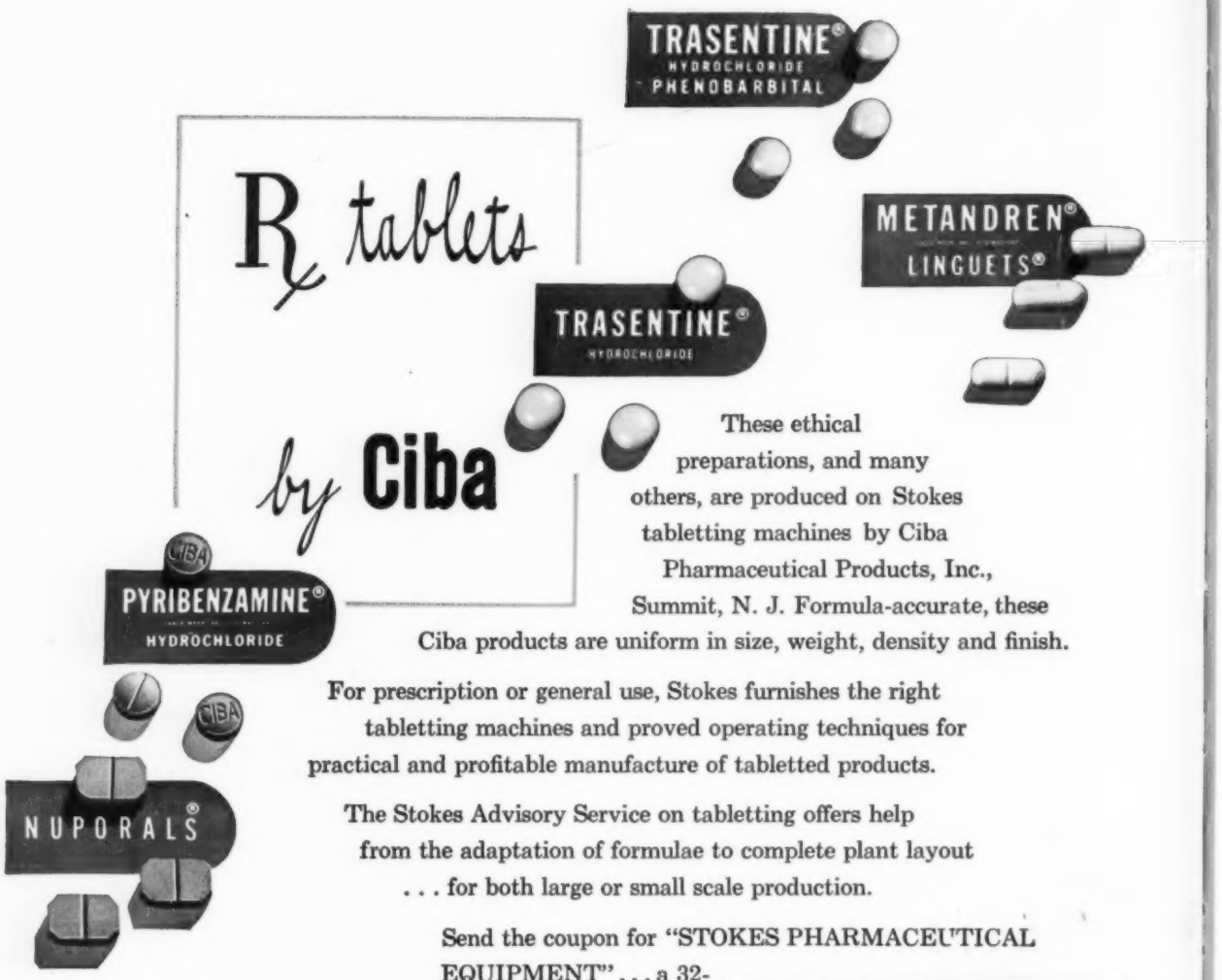

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spouts on opposite sides would be substituted. Each spout would be fitted with a simple crank handle to facilitate the easy flow of the popcorn. Inverted on a packing bench between two packers working from the same drum, each using the nearst spout, the popcorn would be cranked as needed into the shipping containers. As compared with the hand method now used in working with shredded paper, Mr. Rausch is convinced, without actual tests, that many hours of packers' time would be saved daily by using popcorn.

No cost analysis of popcorn has yet been made, but estimates, based on the current market price of corn kernels from neighborhood farms, and theoretical costs of popping it in the 300 pounds daily quantity which would be required by Winthrop-Stearns in Rensselaer has convinced Mr. Rausch that an attractive savings over present paper use would be achieved. One estimate of $25,000 a year savings for Winthrop-Stearns' Rensselaer operations alone has been made.

Mr. Rausch has a patent pending on his idea, planning with the exception of his own company which he has offered free use, to issue licenses to big users on a commercial basis.

Lab. Change Can Mixer

For mixing small laboratory batches of from 1 quart to 1½ gallons of material, a new #30-EL Motor Driven Laboratory Change Can Mixer has been developed by Charles Ross & Sons Co., Brooklyn, N. Y.

This new mixer is reported to mix efficiently most varieties and consistencies of materials, and is available in 1-gallon or 2-gallon capacity sizes.

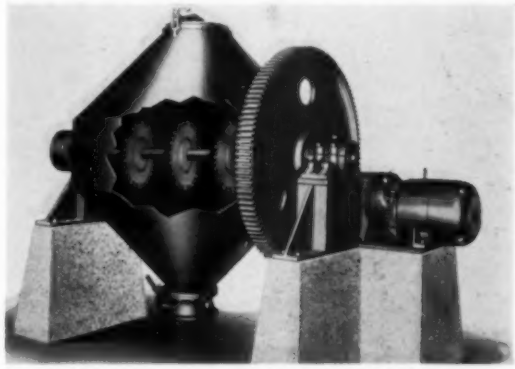
The unit, which can be run on ordinary light circuit, facilitates determination of formulae and other details in pilot sizes prior to production cycles. The mixer is very flexible, having a variable speed motor which permits stirrer speeds within a wide range of RPM'S.

The direction of rotation can be reversed. The double motion stirrers revolve on their own axis and simultaneously around the circumference of the can, assuring a homogeneous mix in minimum time.

The cans are of pressed seamless sheet steel and heavily tin-coated. Stirrers and cans are available in stainless steel or other metals as desired.

Patterson Disintegrator-Blender

The Patterson Foundry & Machine Company, East Liverpool, Ohio, announces the design and manufacture of a new Disintegrating Conical Blender. Chemicals, pigments, powdered metals, resins, drugs, food products,



etc., that contain small amounts of moisture are successfully mixed in this Blender, even though such materials, particularly when characterized by small particle size, may form agglomerates during the mixing cycle.

The Disintegrating Conical Blender is equipped with disintegrating elements mounted on a shaft extending through the Blender trunnion. These elements, rotating at high speed and in counter rotation to the Blender proper, break up agglomerates that are formed, but particle size is not reduced.

This new Blender is produced in sizes having operating capacities of .35 to 550 cubic feet and is available in mild steel or alloys as required.

Yeomans' Pumps

A full line of pumps for handling corrosive and non-corrosive liquids, solids-carrying liquids and dry and semi-dry materials is presented in a new condensed catalog issued by Yeomans Brothers Company, 1433 North Dayton Street, Chicago.

The book is organized as follows:

Corrosive and Non-Corrosive Liquids—with emphasis on vertical submerged centrifugal pumps.

Solids-Carrying Liquids—horizontal and vertical non-clog centrifugal pumps to handle solids, in various styles and different bearing constructions.

Dry and Semi-Dry Materials—the Yeomans "Transporter" for bulky materials.

(Continued on page 89)

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PATENT THOUGHTS AND TRENDS

*by Thomas Cifelli, Jr., Patent Attorney**

The Supreme Court on Gadget Patents

Many will doubtless remember hearing over the radio and reading in the newspapers early in December about the U. S. Supreme Court cracking down on so-called gadget patents and about the propensity of the Patent Office to grant patents on all kinds of devices. When the writer first heard the evening radio account he was interested, to say the least, in studying the full opinion and accordingly went to his office the next day with that as the first matter on his agenda. However, as feared, the telephone was ringing when he arrived at his office and on the other end was a client who made no bones about his opinion of a patent attorney who could not write a patent application which was completely allowed on the first Patent Office action. After all, "the Supreme Court said that it was a cinch to get patents. How come you have so much trouble?"

So, the study of the decision which got so much publicity began.

Facts of the Case

The parties involved were the A & P and the Supermarket Equipment Corporation. The invention dealt with a cashier's counter equipped with a three-sided frame, or rack, with no top or bottom, which when pushed or pulled, will move groceries deposited within it by a customer to the checking clerk and leave them there when it is pushed back to repeat the operation. The counter speeds the customer on his way, reduces checking costs for the store and admittedly has been widely adopted and successfully used.

The two lower federal courts upheld the validity of the patent and since infringement was admitted, the patentee prevailed.

Mr. Justice Jackson, writing the *opinion for the Supreme Court*, stated:

> Neither court below has made any finding that old elements which made up this device perform any additional or different function in the combination than they perform out of it. This counter does what a store counter always has done—it supports merchandise at a convenient height while the customer makes his purchases and the merchant his sales. The three sided rack will draw or push goods put within it from one place to another—just what any such a rack would do on any smooth surface—and the guide rails keep it from falling or sliding off from the counter, as guide rails have ever done. Two and two have been added together, and still they make only four.

Mr. Justice Jackson noted that the Court of Appeals and the patentee both leaned heavily on evidence that the device filled a long-felt one and has enjoyed commercial success. However, he stated that the well known rule that commercial success without invention will not make patentability. Because the Supreme Court felt that the standard of invention applied by the lower courts was less exacting than that required where a combination is made up entirely of old components, it found the patent invalid. While recognizing the fact that the concept of invention is inherently elusive when applied to combinations of old elements and the imprecision of the English language being what it is, Mr. Justice Jackson laid down the rule which he feels is as precise as the subject permits, as follows:

> The mere aggregation of a number of old parts or elements which, in the aggregation, perform or produce no new or different function or operation than that theretofore performed or produced by them, is not patentable invention.

Comment on Court's Decision

The above is a brief summary of the *court's decision*. Nowhere in the decision is any mention made of so-called gadgets or any propensity on the part of the Patent Office to issue patents willy-nilly.

However, Mr. Justice Douglas, with whom Mr. Justice Black agreed, saw fit to file what the lawyers call a concurring opinion. Naturally, anything that a Justice of the U. S. Supreme Court states in connection with a decision is worthy of the fullest consideration. But it should be noted that a concurring opinion is only that of the judge who writes it and any who may agree with him. In the case in question, therefore, whatever Mr. Justice Douglas said is attributable to him and Mr. Justice Black. Whatever Mr. Justice Jackson said in the opinion of the court, presumably represents the thinking of the other Justices. In other words, if the two opinions are to be weighted, the Jackson opinion is entitled to a weight of 7 while the Douglas opinion is entitled to a weight of 2.

So much for polemics. What did Mr. Justice Douglas say?

Justice Douglas' Views

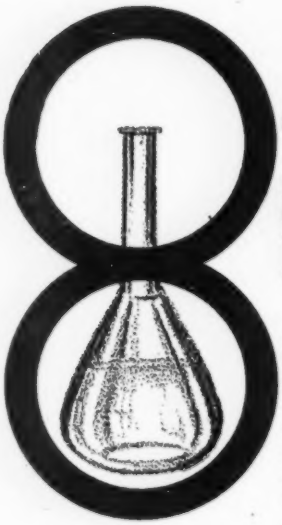
Mr. Justice Douglas stated at the outset that Congress does not have a free rein in deciding what patents should be granted but is under the restraint imposed by Article 1, Section 8 of the U. S. Constitution, which states as follows:

> The Congress shall have power . . . to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.

Mr. Justice Douglas, feeling that every patent is the grant of a privilege of exacting tolls from the public, said that to justify a patent the invention had to "serve the ends of science—to push back the frontiers of chemistry, physics, and the like; to make a distinctive contribution to scientific knowledge." He then resurrected the "flash of genius" test and categorically stated that the Constitution never sanctioned the patenting of gadgets. He continued "patents serve a higher end—the advancement of science. An invention need not be as startling as an atomic bomb to be patentable. But it has to be of such quality and distinction that masters of the scientific field in which it falls will recognize it as an advance."

In the words of Mr. Justice Douglas, "the attempts through the years to get a broader, looser conception of patents than the Constitution contemplates have been persistent. The Patent Office, like most administrative agencies, has looked with favor on the opportunity which the exercise of discretion affords

*Gaylor, Cifelli & Jurick, Newark, N. J.



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to expand its own jurisdiction. And so it has placed a host of gadgets under the armour of patents—gadgets that obviously have had no place in the constitutional scheme of advancing scientific knowledge."

Comments on Concurring Opinion

As this is being written our country is in grave danger. A state of national emergency has been declared by the President. In place of the television sets, shiny new autos, refrigerators, etc., etc., etc. which American industry so pre-eminently can provide for peaceful purposes, it now finds itself with the unpleasant task of making guns, warships, tanks, airplanes, etc., etc., etc. in order to help defend not only our own country but the entire democratic part of the world. If such things have to be, is it not better that we can call upon the results of step-by-step improvements, such as, for example, the B-36 in place of the basic invention of the Wright brothers flown as Kitty Hawk? Furthermore, is it not better that the new army of defense workers will be able to do their work in well-lighted factories instead of premises illuminated by the revolutionary (in the popular mind) lamp of Edison?

The thought here is not to belittle the pioneer—far from it. However, one cannot help but wonder where we would be today without the U. S. patent system which has encouraged the step-by-step advancing technology, whether in the field of peaceful activities or war weapons. Too many of us, in high places as well as low, forget that things just do not happen; there must be a reason. In the field of technology, Americans are no more inventive than anyone else. Further, while blessed with many natural resources, the U. S. is not alone in this respect. Yet, we stand as the hope of the democratic world, mainly because of our huge productive machine. Take away the twin incentives offered by the U. S. patent system—and by no other patent system in the entire world—and in time we will find ourselves in the horse and buggy days of technology. The incentives referred to are simply (1) the incentive to invent and (2) the incentive to invest.

It appears to the writer that the inevitable consequence of the adoption of the views set forth in the concurring opinion would result in making the U. S. A. a third-rate nation industrially at a time when to survive we have to be a first-rate industrial nation.

Aside from the general comments already made, it is difficult for the writer to understand why Mr. Justice Douglas believes that a patent to be justified has to serve the end of *science* only. The Constitutional provision, which Mr. Justice Douglas properly calls into play, does not stop at the word *science* but also sets up the patent system to promote "the useful arts." The two, "science and the useful arts, are given equal billing in the Constitution. It would seem that they are entitled to equal billing by the courts and Congress. Under this view, many so-called gadgets should not be frowned upon as they increase employment and have the net result of raising the standard of living.

But even aside from all the foregoing, one would seem to be entitled to ask: just what is a basic invention which the concurring opinion would seemingly uphold? In the first place, the only example of what the concurring opinion considers to be a startling invention, namely, the atomic bomb, is not patentable by act of Congress. Furthermore, and here is what is very often overlooked, the atomic bomb was not the work of one individual but the product of the step-by-step advances brought about by many workers. Actually, it could not even be said to have been surprising, ever since Einstein's law equating energy to the product of the mass and the square of the velocity of light.

Also, what has just been said with regard to the atomic bomb being the product of the small advances made by many individuals can also be said about the so-called basic inventions of Edison, Alexander Graham Bell, Baekland, etc. Indeed, a few years ago someone took the trouble to make a study of many of the so-called basic inventions and found that in each case the contribution of the person to whom we rightfully give credit was merely taking the last step to change failure into success.

Conclusion

The views expressed in the concurring opinion would seemingly result in the elimination of the U. S. patent system as we know it. Such a result could not have been in the minds of Mr. Justice Douglas and Mr. Justice Black. Consequently, the conclusion of the writer is that the views expressed in the concurring opinion were merely intended to be applied to the specific invention which was before the court. As to this invention all of the members of the court felt that it did not amount to a patentable advance.

Streptomycin Suit Settled

The important suit brought by Dr. Albert Schatz against Prof. Selman A. Waksman and the Rutgers Research and Endowment Foundation was recently settled on what appears to be a very happy basis. Dr. Schatz is to receive 3 per cent of the royalties earned by the streptomycin patent, U. S. 2,449,866, and is entitled not only to legal but also to scientific credit as the co-discoverer of streptomycin.

In the October 1950 issue, this department gave a rather full treatment of the suit and those who are sufficiently interested in the matter may refer to that issue for the various allegations and defenses and other details.

In addition to the 3 per cent royalty interest, Dr. Schatz is to receive $125,000 for the foreign rights. One estimate has it that his earnings from streptomycin will amount to about $500,000.

The settlement also provides for the distribution of 7 per cent of the royalties to 11 other individuals. Indeed, Dr. H. Boyd Woodruff is to receive 2 per cent of the royalties, apparently because of his collaboration with Dr. Waksman in work leading up to the isolation of streptothricin a predecessor of streptomycin.

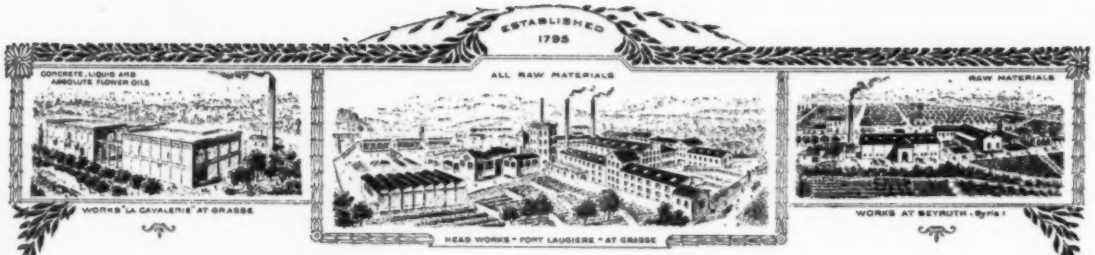
The settlement will not affect Prof. Waksman's present returns under his agreement with the Foundation, as he will continue to receive 10 per cent of the royalties. While his agreement with the Foundation calls for 20 per cent of the royalties, Prof. Waksman in December 1949 voluntarily reduced his share to 10 per cent.

The main charges of Dr. Schatz, namely, that Prof. Waksman practiced fraud and duress were retracted in a stipulation signed by both parties.

As could be expected, Dr. Robert C. Clothier, President of Rutgers University and of the Foundation, was happy with the compromise, pointing out that 80 per cent of the royalties, which up to September 30 were approximately $2,360,000, would be kept by the Foundation. The latter plans to build an Institute of Microbiology with part of the proceeds.

Aluminum Chlorohydrate Astringent

The validity of U. S. patent 2,492,085 issued on the (*Continued on page 110*)



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YOUR TRADE-MARK RECORD

by John H. Graham
International Patent and Trade-Mark Consultant

Comments on Some Recent Decisions

Some time ago we devoted a column exclusively to the "Sunkist" decision which at that time was causing quite some disturbances of mind to the trade-mark fraternity.

You will remember that the whole case turned upon just how far the Courts would go in deciding that goods of different parties were of the same descriptive properties and thus the same or closely similar trade-marks could only be confusing to the public.

Since then, many decisions have been given out widening the barriers of confliction of goods. It would seem that if the goods of the parties in conflict go over the same counter or are sold in proximity, the liability of conflict exists.

In the particular industries with which we are concerned, this poses a great problem.

Toilet goods, soaps, perfumes, cosmetics and drugs have widely assorted avenues of sale.

Thus, it would seem that even if the other fellow's mark is for a tractor, there is a possibility, in rural areas at least, of your goods being sold over the same counter or in proximity, despite the wide difference which is obvious between the goods.

Some crystallizing of thought may be expected as we progress, legally, through the lackwash which was expected and now exists, of decisions under the Act of 1946.

Particularly the question arises as to what the future expansion of your business may entail and how far your hands may be tied in expanding your present line to a kindred but slightly different line. It would appear that you may run into trouble because of the wide scope being now given to marks and the goods they cover.

One thing made clear and borne out by a recent decision, is that no trade-mark owner can include or monopolize a speculative future use of his mark.

This may act in some cases against you but in others it is likely to be in your favor because it means that the owner of a trade-mark for tractors cannot usurp the field on that mark, for, say, hand creams simply by holding that he might someday like to put up a hand cream for his customers.

The decision referred to involved an opposition between Libby-Owen-Ford Glass Company and Plastron, Inc.

Briefly, "Plastron" was applied for as a trade-mark for shower curtains made from a plastic film. Libby-Owens-Ford opposed on the basis of their trade-mark "Plaskon" for synthetic heat hardening molding compositions, etc.

The case went all the way up to the U. S. Court of Customs and Patent Appeals who affirmed the lower decisions to refuse the opposition and allow "Plastron" to be registered in spite of "Plaskon."

It was held that the shower curtains do not possess the same descriptive properties as powdered or liquid plastic products.

Libby-Owen-Ford's products were raw or partially prepared materials of many diversified commercial uses and were sold in bulk.

They sell no finished articles made of their materials under the "Plaskon" trade-mark.

On the other hand Plastron, Inc. uses its "Plastron" trade-mark on various finished articles sold to retailers for resale to the public.

The mere fact that Libby-Owen-Ford stated that "it is entirely possible, in fact probable" that Libby-Owen-Ford will also manufacture and sell shower curtains was held insufficient to show conflict between the goods since there was nothing to show that they had any intention of so extending their business. It was thus concluded that they could not include a speculative use of their mark.

This, therefore, is a very interesting case to all of us in the fields parallel to those involved.

We have the questions of raw material against the fabricated article, and possible "future business" or expansion of the line of goods.

Both are important and this decision should clear the air a litle as to how far similarity of goods and possible conflict is involved.

Since the marks are practically the same (Plasko: versus Plastron), these were the only issues.

Another decision of interest is that of Assistant Commissioner Murphy in the opposition proceedings between Botany Mills, Inc. and Lanolin Plus Cosmetics, Inc.

It was therein held that soap containing lanolin as an ingredient were essentially goods of the same descriptive properties as cosmetics containing lanolin.

Again the question turned on the trade outlets as a means for determining whether there was conflict of goods or a possibility of confusion thereof when the marks both contained the word "Lanolin."

From the "What Can I Get Away With" Department

The Patent Office finally refused, an appeal, to permit the trade-mark "THE

CHOLESTEROL IN ITS MOST ACTIVE AND EFFICIENT FORM

the

AMERCHOLS

are naturally superior

The AMERCHOLS are surfactants which are NATURALLY good for the skin and hair. They are odorless, color free forms of cholesterol and related rare sterols which we isolate in purified form from animal tissues. They are stable in the presence of acids, alkalies and most drugs.

Try AMERCHOL L-101 in your hair preparations. It is a highly effective liquid-cholesterol penetrant.

WE KNOW OF NO CASE OF ALLERGY DUE TO AN AMERCHOL

Our research laboratories are available to you for advice and information. Our booklet will help you formulate the AMERCHOLS in O/W and W/O emulsions.

LABORATORY DATA

FOR PHARMACEUTICALS AND COSMETICS

AMERCHOL STEROL PRODUCTS

AMERICAN CHOLESTEROL PRODUCTS INCORPORATED MILLTOWN, NEW JERSEY

AMERICAN CHOLESTEROL PRODUCTS INCORPORATED

MILLTOWN - - - NEW JERSEY

Eye make-up containers

Hinged Plastic Mascara Box with Mirror

Also Plastic Jars in ½, 1, 2 and 3 oz. sizes for eye creams, pads, etc.

Eye Shadow Box

A Propel and Repel Eye Pencil complete with choice of six crayon shades.

CALUMET MANUFACTURING CO., INC.

Sam Schwartzman, Pres.

565 Fifth Avenue — New York (17), N. Y. — MUrray Hill 8-4270

SULPHUR THAT FUMES" to be registered for sulphur, on the ground that it was incapable of distinguishing the goods.

It was held that the slogan merely recounted a property of the actual goods.

However, the following marks were registered for the goods defined:

"ONLY THE ORIGINAL HAS THE RED TOP"—for oil paint.

"MUMM'S THE WORD"—for the famous Mumm's Champagne.

"WHITE AS SNOW—SOFT AS DOWN"—for toilet towels, tissues and so on.

"NATIONAL BARN DANCE"—for entertainment on radio and television.

"SOF—N—IT"—for fur pelt softener.

"THE DIRT DOCTOR"—for radio programs.

In other words, your guess is as good as mine—in case of doubt, try to register and who knows!

The following Trade-Marks were recently published in the Official Gazette of the United States Patent Office.

Airlite—51—BCDS—588,586
John Hudson Moore, Inc., N. Y., N. Y.
Ser. Nov. 30, 1949 D. U. Nov. 17, 1949

Arc Bleu—51—B—589,490
Stella R. Wise, N. Y., N. Y.
Ser. Dec. 16, 1949 D. U. Nov. 12, 1948

Bois Des Iles—51—B—585,743
Chanel, Inc., N. Y., N. Y.
Ser. Oct. 4, 1949 D. U. Feb. 1929

Botalan—51—C—586,587
Botany Mills, Inc., Passaic, N. J.
Ser. Oct. 20, 1949 D. U. Jan. 13, 1949

Brexcene—52—H—564,709
John H. Breck, Inc., Springfield, Mass.
D. U. July 1, 1948

Briefer—51—BCDS—588,588
John Hudson Moore, Inc., N. Y. N. Y.
Ser. Nov. 30, 1949 D. U. Nov. 17, 1949

Calavo—51—M—560,966
Calavo Growers of California, Los Angeles, Calif.
Ser. July 9, 1948 D. U. Feb. 25, 1937

Canastra—51—B—592,223
Rejane, Inc., N. Y., N. Y.
Ser. Feb. 9, 1950 D. U. Feb. 2, 1950

Climax—51—BC—588,382
Parfums Blanchard, N. Y., N. Y.
Ser. Nov. 26, 1949 D. U. Nov. 7, 1949

Debonair—51—BCD—582,951
Daggett & Ramsdell, Inc., Newark, N. J.
Ser. Aug. 4, 1949 D. U. January 1949

Dresset—51—H—590,568
United Laboratories, Cottonwood, Ariz.
Ser. Jan. 9, 1950 D. U. Dec. 9, 1949

Einot—51—G—575,577
Einot Inc., Fremont, Nebr.
Ser. Mar. 17, 1949 D. U. Oct. 25, 1946

Exelento—51—CDH—586,239
Exelento Medicine Co., Atlanta, Ga.
Ser. Oct. 13, 1949 D. U. Nov. 11, 1912

Fai Dells—51—H—579,768 (And Des.)
W. Wilson, DBA Fai Dells Co., Gary, Ind.
Ser. May 13, 1949 D. U. Apr. 6, 1949

Fitch—51—H—573,415
F. W. Fitch Co., Des Moines, Iowa
Ser. Feb. 7, 1949 D. U. 1893

Gal Perfumeria—51—BCDH—556,473
Perfumeria Gay, S. A. Madrid, Spain
Ser. May 7, 1948 D. U. Apr. 10, 1923

Gee—52—A—579,778
Armour & Co., Chicago, Ill.
Ser. June 1, 1949 D. U. Apr. 19, 1949

Katz—51—CHM—570,209
Katz Drug Co., Kansas City, Mo.
Ser. Dec. 8, 1948 D. U. Sept. 5, 1928

Kep—51—K—583,246
Kep Co., Inc., Houston, Tex.
Ser. Aug. 11, 1949 D. U. May 12, 1949

Lanotan—51—S—539,558
Peau d'or Sales Corp., Miami, Fla.
Ser. Oct. 30, 1947 D. U. Dec. 1944

Latherizer—51—I—575,564
Associated Brands, Inc., Brooklyn, N. Y.
Ser. Mar. 17, 1949 D. U. July 15, 1945

Lipmatch—51—C—574,041
Lipmatch Co., N. Y., N. Y.
Ser. Feb. 17, 1949 D. U. Aug. 6, 1948

Lustress—52—H—549,419 (And Des.)
Kay Daumit, Inc., Jersey City, N. J.
Ser. Feb. 11, 1949 D. U. Aug. 19, 1947

Misteria—51—B—564,407
E. H. Shannon, DBA Eve Shannon, N. Y., N. Y.
Ser. Aug. 30, 1948 D. U. July 1, 1948

Pervenche—51—B—573,531
Coty, Inc., N. Y., N. Y.
Ser. Feb. 9, 1949 D. U. Jan. 4, 1949

Quell—51—D—575,142
M. A. Hartlett, DBA M. Hartlett Co., Woodstock, Ill.
Ser. Mar. 9, 1949 D. U. Dec. 1, 1938

Rajah—51—H—554,568
J. L. Hopkins & Co., N. Y., N. Y.
Ser. Apr. 14, 1948 D. U. 1918

Rise—51—I—584,969
Carter Product Inc., N. Y., N. Y.
Ser. Sept. 17, 1949 D. U. Sept. 14, 1949

Snap-Curl—51—G—579,058
V. A. Ragsdale, DBA Tidee Co., St. Louis, Mo.
Ser. May 18, 1949 D U. May 1, 1949

Sportlite—51—BCDH—588,589
John Hudson Moore, Inc., N. Y., N. Y.
Ser. Nov. 30, 1949 D. U. Nov. 17, 1949

Supersec—51—D—577,183
Germain Monteil Cosmetic Corp., N. Y., N. Y.
Ser. Apr. 15, 1949 D. U. Apr. 12, 1949

Tambor—51—BCH—586,684
Consolidated Cosmetics Inc., Chicago, Ill.
Ser. Oct. 22, 1949 D. U. Dec. 10, 1932

Totem—52—A—495,071
Les Parfums de Dana, Inc., N. Y., N. Y.
Ser. Jan. 19, 1946 D. U. Dec. 31, 1945

Trill—51—C—573,561
Louis Napolitan, DBA L. ry, Inc., N. Y., N. Y.
Ser. Feb. 9, 1949 D. U. Jan. 26, 1949

Twenty Carats—52—A—495,072
Les Parfums de Dana, Inc., N. Y., N. Y.
Ser. Jan. 19, 1946 D. U. Dec. 31, 1945

Act of 1946

The following Trade-Marks have been recently republished under the terms of the above (Lanham Act). No opposition can be filed against them but they are all subject to cancellation proceedings.

Fore—51—52—BCEHIK—275,460
Reg. Sept. 23, 1930 To A. R. Winrick, Inc., N. Y., N. Y.
Repub. by registrant

High Speed—52—AHI—284,080
Reg. June 16, 1931 To Comfort Mfg. Co., Chicago, Ill.
Repub. by registrant

Kim—51—K—275,220 (And Des.)
Reg. Sept. 16, 1930 To H. E. Kimble, Alberquerque, N. M.
Repub. by registrant

Pullproof—51—52—284,081
Reg. June 16, 1931 To Comfort Mfg. Co., Chicago, Ill.
Repub. by registrant

Satinol—51—B—348,354
Reg. July 27, 1937 To Phoebe Campell, Montreal, Can.
Repub. by registrant

Vivian Shaw—51—CDHS—574,716
Reg. 1931 To May Dept. Stores, DBA Kaufmann Dept. Stores, St. Louis, Mo.
Repub. by registrant

Management Forum

(Continued from page 81)

Filabelmatic

This is the name of the automatic machine designed and built to fill and label 4 different kinds of viscous liquids in 2 different sized bottles, and also to fix labels to cosmetic jars of still another size and shape. This standard machine was installed in the plant of Studio Girl Cosmetics, Glendale, California. It is manufactured by the Biner-Ellison Machinery Co., of Los Angeles, with special but relatively minor changes from their regular "Filabelmatic" line. Short and interrupted runs, variety in sizes of bottles to be filled and labeled as well as jars to be labeled only become fast, simple, economical set-ups with the new automatic filler-labeler.

Important user features of the new machine include: automatic continuous operation for filling and labeling, simultaneously; operational speed from 5 to 60 bottles per minute; dual pneumatic presses for utmost adhesion in securing labels; an automatic unscrambling table for bottle feeding optional equipment and operation on the full vacuum filling principle. Positive feed, compact size and positive adjustability to accommodate different liquid viscosities, weights and foam variables. Extra heavy construction throughout assured longest possible productive life with a minimum of maintenance.

The Biner-Ellison Machinery Co., formerly known as the Biner Siegrist Machinery Mfg. Co., is one of the largest and oldest firms of its type west of Chicago.

COMPOUNDER'S CORNER

Shampoo Evaluation

In an effort to measure the cleansing action of a shampoo, said G. Burnett and D. H. Powers at the December 5, 1950 meeting of the Society of Cosmetic Chemists, a laboratory method was set up which gives reproducible values for the soil or grease removal from a standard test sample consisting of Australian wool yarn "in the grease." This type of grease more closely resembles actual hair soil and dirt than any other test material investigated. Using this laboratory method twenty-one commercial shampoos were tested and found to give from zero to ninety per cent soil removal. Several shampoos were poorer than water alone and those made from synthetic detergents generally removed from two to three times as much soil and grease as those made from fatty acid soaps.

Thirty chemical compounds were tested for effectiveness as soil and grease removers and they ranged from 90 per cent soil removal, to increasing the soil by 10 per cent. The alkyl sulfates and polyglycol ethers were generally slightly superior to fatty acid salts and the sulfonates and amides varied from slightly better to slightly poorer than the fatty acid salts. The quaternaries increased the soil on the fiber.

A laboratory test comparable to actual shampoo conditions was obtained by using skeins of Australian wool yarn in the grease and scouring for four minutes at 100°F. with varying concentration of detergents or shampoos. Excellent checks on repeat runs were obtained and shampoos containing similar type active ingredients gave similar effectiveness. The skeins of wool yarn after scouring and rinsing were extracted to determine the residual grease left on the fiber. Results were expressed as the per cent of total grease removed. Sixteen samples could be run in a single day by a single operator. Soiled human hair was run according to this test and results obtained were comparable to this use of wool yarn in the grease, although the values for the grease or soil removed were much lower. Studies were also made of the effects of increasing scouring times and varying concentrations of the soaps and detergents.

Tablet Disintegrating Agents

An investigation has been made by H. Berry and C. W. Ridout (through *Pharm. J.* 165:256, 1950) of the effect of varying the degree of compression on disintegration time (conditions of formulation, speed of compression and coatings being the same) and of the relative values of potato starch and alginic acid as disintegrating agents. In the latter study the compression values and speed of compression were kept constant and a coating was not used. Phenacetin tablets were used as these had previously been shown to give irregular results. Variation in the weights and disintegration times of tablets was avoided by a single punch Manesty hand machine. Measurement of disintegration time was made in accordance with the B.P. method but using 12 tablets. A large batch of granules was prepared, stored in an airtight container and used as required after the addition of lubricant (1 per cent stearic acid) and disintegrating agent.

Experiments were also made using 3, 6 and 10 per cent of alginic acid as the disintegrating agent. Alginic acid is a polymerized mannuronic acid extracted from seaweed. It is a water-insoluble, free flowing powder which was most conveniently incorporated at the time of granulation. The alginic acid forms an integral part of the granules and acts by disintegrating them internally instead of by pushing apart the whole granules. Tablets prepared with alginic acid having satisfactory disintegration times were much less friable than those containing potato starch. Phenobarbitone tablets made with it disintegrated much more quickly than those made with potato starch (15 per cent.) and with barbitone tablets the disintegration time was about the same. Storage for three months had little effect on these tablets and all of them disintegrated within 15 minutes. Berry and Ridout recommend that the disintegration times of all uncoated tablets be reduced to 15 minutes.

Diaper Rash Ointment

Included among the preparations cited by G. L. Phillips in his column *in the Bulletin of the American Society of Hospital Pharmacists* (7:286, 1950) is the following alkali neutralizing and protective ointment for the alleviation and prevention of diaper rash:

Balsam peru	**1.0 Gm.**
Castor oil	**1.0 Gm.**
Boric acid powder	**2.0 Gm.**
Zinc oxide	**5.0 Gm.**
Zinc stearate	**5.0 Gm.**
White petrolatum	**86.0 Gm.**

Mix the castor oil and balsam of Peru intimately; add this mixture to the petrolatum, mix thoroughly, and add the remaining ingredients. Mix carefully and mill until perfectly smooth.

Tracers for Testing Enteric Coatings

C. F. Peterson, C. O. Lec and J. E. Christian (*J. Am. Pharm. Assoc.*, Scient. Ed. 39:607, 1950) have developed an *in vivo* method for testing enteric coatings is described which involves coating small pills containing radiosodium, administering them to a rat, and determining the time of disintegration by the appearance of radio-sodium in the circulation and the site of disintegration by direct observation of the gastrointestinal tract. The results of the method have been compared to the results of an *in vitro* method. The results of the *in vitro* tests show that the individual coating lots had similar disintegration characteristics. The average of the estimated intestinal disintegration time for the *in vivo* tests was sixty-one minutes which compares to sixty minutes average for the *in vitro* tests on all but one coating lot which was seventy-six minutes. This last lot also gave a gastric resistance time of eight hours, which compares to six and one-half hours average for the other lots. The *in vivo* test did not show any significant difference between the coating lots.

The advantages claimed for the new method are that it establishes the site and the time of disintegration. The remains of the pill can be studied to determine the manner in which the coating dissolved. These points are

of interest in establishing the efficiency of a new enteric coating formula. The disadvantage of this method is that very small pills (or tablets) must be formed and coated. The coating should be relatively resistant to mechanical damage during the administration procedure.

Usefulness of Hamamelis (Witch Hazel)

Hamamelis or witch hazel, Says T. Ruemele (*Perf. & Essent. Oil Rec.* 41:323, 1950) is finding increasing use in cosmetic and medical preparations. Hamamelis exerts a styptic, astringent and healing action. Those properties derive chiefly from the tanning principle, and presumably from the oils and fats contained in the plant. Hamamelis is used in the form of hamamelis water, hamamelis solution, extract of hamamelis, and tincture of hamamelis.

These preparations find frequent use in the preparation of various types of cosmetics. Indicative is its use in the following simple skin jelly:

Gum tragacanth, pwd.	**39.0 per cent**
Glycerine	**36.6 " "**
Extract hamamelis, dist.	**24.4 " "**

So-called foams may also be made with Hamamelis, as in the following example.

Stearic acid	**12.0 per cent**
Sodium carbonate	**1.8 " "**
Glycerine	**1.4 " "**
Hamamelis water	**60.0 " "**
Water	**24.8 " "**

The usefulness of hamamelis in creams is illustrated in a preparation made from:

Stearic acid	**15.0 per cent**
Potassium hydroxide	**0.7 " "**
Sodium hydroxide	**0.2 " "**
Wheat starch	**2.0 " "**
Glycerine	**10.0 " "**
Lanolin, anhydr.	**0.1 " "**
Hamamelis water	**71.5 " "**
Perfume	**0.5 " "**

In discussing the formulation of hamamelis-containing tonics and lotions, Ruemele cites several typical formulas, including the following:

1

Zinc phenol sulphonate	**0.2 per cent**
Camphor	**0.1 " "**
Menthol	**0.1 " "**
Alcohol	**9.0 " "**
Hamamelis water	**90.4 " "**
Perfume	**0.2 " "**

2

Tincture of sage	**0.50 per cent**
Extract hamamelis, dist.	**2.50 " "**
Borax	**0.50 " "**
Glycerine	**8.00 " "**
Alcohol	**34.75 " "**
Water	**53.75 " "**

3

Boric acid	**1.0 per cent**
Glycerine	**2.9 " "**
Menthol	**0.1 " "**
Alcohol	**25.5 " "**
Hamamelis dist.	**30.0 " "**
Rose water	**40.0 " "**
Perfume	**0.5 " "**

More specialized is the following formula for an after-shave lotion:

Chlorothymol	**0.05 per cent**
Menthol	**0.05 " "**
Hamamelis water	**20.30 " "**
Alcohol	**23.40 " "**
Water	**56.20 " "**

Rather interesting is the use of hamamelis in the preparation of a brushless shaving cream, like the following:

Stearic acid	**15.0 per cent**
Triethanolamine stearate	**7.5 " "**
Hamamelis water	**50.0 " "**
Glycerine	**5.0 " "**
Water	**22.5 " "**

Also noteworthy is a powder containing both witch hazel extract and anhydrous lanolin:

Extract hamamelis, dist.	**5.0 per cent**
Adeps lanae, anhydr.	**5.0 " "**
Zinc oxide	**30.0 " "**
Talcum	**55.0 " "**
Magnesium carbonate	**5.0 " "**

Considering other types of products, Ruemele, cites a typical eye lotion made with hamamelis:

Boric acid	**2.00 per cent**
Zinc sulphate	**0.10 " "**
Sodium biborate	**0.50 " "**
Extract hamamelis, dist.	**12.00 " "**
Propyl ester benzoic acid	**0.05 " "**
Distilled water	**85.35 " "**

In considering the use of this material in ointments, he cites its employment in a chilblain ointment made from:

Camphor	**5.0 per cent**
Sesame oil	**10.0 " "**
Adeps lanae, anhydr.	**45.0 " "**
Peru balsam	**10.0 per cent**
Extract hamamelis, dist.	**10.0 " "**
Water	**20.0 " "**

Similarly indicative is the use of extract in the standard Hamamelis Ointment B. P. C. This consists of:

Extract hamamelis	**12.5 per cent**
Olive oil	**30.0 " "**
Lanolin, anhydr.	**57.5 " "**

Literature Sources

A very comprehensive discussion on current literature sources was presented by G. Schutze before the Society of Cosmetic Chemists during the meeting held on December 5, 1950. She pointed out that technical information of interest and value to the research worker in the cosmetic industry is to be found in various publications of which books, periodicals, house journals, publications of professional societies, trade catalogues, technical reports, specifications and patents provide the sources of first importance. Apart from a limited number of standard reference books, most of the published technical information is to be found in publications other than books. The newer specialized reference texts which have replaced the classical works are reviewed and evaluated, and the birth of several new journals is recorded. The advertising pages of the current technical journals are chemically informative giving much new information briefly. Specifications, properties, uses, and typical reactions of new chemicals are frequently given. Not only are these advertising layouts valuable but many of these manufacturers publish pamphlets and bulletins that explain in detail their products, processes, and equipment. House journals are issued regularly by some firms and these organs contain information of direct practical, scientific, and technical value, that will often be found in no other publication. Societies and associations not only publish journals containing pertinent information for the industry, but these organizations have intelligence committees which issue bulletins, reports, and specifications exceedingly important to the cosmetic industry. The results of industrial research efforts are published through the medium of patents. It seems proper, therefore, to regard patents as the only source of latest technical information. Besides data obtainable from books, periodicals, manufacturers and societies, the U. S. government is a rich source of technical and statistical information.

ADVANCING THERAPY

Hexamethonium Salts

Two reports in the *British Medical Journal* for October 7, 1950, point to the potential value of hexamethonium salts. In the first of these papers, A. Campbell and E. Robertson report that 8 cases of severe hypertension have been treated with hexamethonium bromide, with a marked lowering of the blood pressure and relief of symptoms. Although experience with this series of patients is limited and the place of hexamethonium in the treatment of hypertension has still to be defined, this preliminary report is recorded because hexamethonium seems to provide a useful method of reducing the blood pressure in severe hypertension, with ready administration and relative freedom from toxicity.

In the second paper, A. W. Kay and A. N. Smith discuss the effect of hexamethonium salts on gastric secretion. In their investigations hexamethonium iodide was given orally to 10 patients with duodenal ulcer—five were rendered achlorhydric, three had a substantial fall in gastric acidity, and in two there was no significant difference between control and test observations. Comparable results were obtained for each individual when the drug was given on repeated occasions. The effect was not prolonged form one day to the next. All hexamethonium halides were found to be active in controlling spontaneous gastric secretion. In a small series of cases the iodide and bromide were found to produce a greater fall in gastric acidity than the chloride. Side-effects, notably postural hypotension, may be present during routine administration of the drug. Throughout the investigation a variability of the action of the drug characteristic to the individual was noted.

Vitamin C in Whooping Cough

In the investigation reported by J. C. De Wit (*Maandschi. V. Kindergeneesk.* 17:367, 1950, through *J. A. M. A.* 144:879, 1950), ascorbic acid was given by mouth or by injection to 90 children with whooping cough. The dosage was 500 mg. daily for the first seven days. After that the dosage was reduced by 100 mg. every two days until it was 100 mg. a day, this dose being continued until cure had been obtained. The disease usually ran its course in 15 days in the children who were given the vitamin by injection and 20 days in those who were given it by mouth. The average duration in 20 children treated by vaccine was 34 days. When ascorbic acid therapy was started during the catarrhal stage, the spasmodic stage was prevented in 75 per cent of the cases, and the number of complications was negligible. The ascorbic acid excretion curves in the urine showed that the excretion was far less than the intake. Absorption and excretion of ascorbic acid became equal three days after clinical cure, which indicates that it would be wise to prolong the treatment for about that time after an apparent clinical recovery.

Bacterial Flora of Skin

The normal bacterial flora of the human skin, say C. A. Evans, W. M. Smith, E. A. Johnston and E. R. Giblett (*J. Investig. Dermat.* 15:305, 1950) has been a problem of interest to investigators for a long time, yet it is difficult to find a satisfactory description of the usual bacterial population of ordinary human skin. To remedy this situation aerobic and anaerobic cultures were made from the scapular and deltoid regions of 17 adults to determine the kinds and numbers of bacteria present at different times and on different areas of the skin. A total of 146 specimens taken over a period of 8 months was included in this study. Results indicated that the bacterial flora is considerably different from that described in most textbooks. In a representative series of 41 tests on 12 subjects, anaerobic bacteria outnumbered aerobes by a ratio of at least 10 to 1 in 46 per cent and at least 100 to 1 in 34 per cent of the tests.

In considering the habitat of bacteria of the skin and factors favoring their multiplication, the following observations were made: (a) Sebaceous glands appear to be the major site of growth of bacteria of the skin. This conclusion is consistent with the predominantly anaerobic nature of the bacteria on skin, and is supported by the occurrence of numerous bacteria with the morphology of propionibacteria and micrococci in smears of sebaceous secretions from the sternum neck, and face. Comparative studies of numbers of bacteria on the palms of the hands where sweat glands are numerous and sebaceous glands are lacking and the ear concha where there are many sebaceous glands, but no sweat glands, support the supposition that the sebaceous glands are the chief site of bacterial growth. (b) Certain bacteria of the skin were active in inhibiting other skin organisms in some of our cultures. It seems fair to assume that such antibiotic activity may be a factor in the bacterial ecology of the skin, in limiting the flora to a few types. (c) Going without a bath for periods of 5 to 7 days did not significantly increase the bacterial population of the skin. (d) Exercise with sweating caused a transient minor increase in skin flora.

Limited studies of bacteria on the skins of the forearms of 8 children, aged 2 to 4 years, demonstrated considerable differences from the flora of adults. To what extent these differences were due to greater contamination of skin from the environment was not determined.

Vitamin E and Infant Weight Gain

A new role for vitamin E is indicated in the report of G. W. Schmidt (*Arch. F. Kinderheilk.* 138:178, 1950). He studied the effect of alphatocopherol acetate in 38 infants, most of whom were less than 3 months old. They had been hospitalized on account of dystrophy after infection or dyspepsia and had not responded to qualitative or quantitative changes in their diet. Synthetic alphatocopherol acetate was available in tablets containing 50 mg. of the synthetic vitamin E. Infants weighing less than 3 Kg. were given 12.5 mg. each day and those weighing more up to 25 mg. daily. In some instances in which the smaller dose was ineffective, doubling the dose had a prompt effect. Medication was continued for two to ten weeks. Only 2 of the infants did not show a noticeable increase in weight. The antianemic effect was not charac-

teristic. Alphatocopherol acetate was given to 26 children between 1 and 14 years of age, who had various myopathic disorders, such as congenital myotonia, paralysis resulting from diphtheria or poliomyelitis, chronic pulmonary disorders, intestinal infantilism or pyelocystitis. Treatment with alphatocopherol acetate did not affect the weight curve, red blood picture or blood sugar. Vitamin E may produce a favorable effect in young nurslings, particularly on the weight curve, which cannot be obtained with other dietetic measures.

New Treatment for Brucellosis

In their search for more effective methods for the treatment of brucellosis, W. E. Herrell and T. E. Barber (*J. A. M. A.* 144:519, 1950) have used a method which in their hands has yielded results better than those obtained with previously available forms of treatment. The method consists of the simultaneous use of aureomycin hydrochloride administered by the oral route and dihydrostreptomycin sulfate administered by the intramuscular route. To date 25 patients with culturally proved brucellosis have been observed and treated by this method. Twenty-one had the bacteremic form of the disease owing to *Brucella abortus*, *Brucella melitensis* or *Brucella suis*. Four had culturally proved brucellosis with localizing lesions. In addition, 10 patients who were acutely ill and who had unmistakable evidence of brucellosis, although blood cultures were not positive, have been treated. In these 35 cases there was one symptomatic relapse but not one single instance of bacteriologic relapse. The follow-up period in this group of cases extends from three to 19 months. Retreatment has not been necessary in any case.

This method is not considered a specific means of treating brucellosis. However, the results to date are far superior to those obtained by any previously available method. Furthermore, the method does not produce the undesirable toxic reactions at times, encountered during the use of methods available before this one was introduced.

Antibiotic from Blood

As noted editorially in the *J. A. M. A.*, (144:1165, 1950), recognition of antibiotics of animal origin is not new. However, attention is drawn to the work done by Whitney, D. M., L. Anigstein and D. W. Micks (*Proc. Soc. Exper. Biol. & Med.* 74:346, 1950). These workers have reported the preparation of an antibiotic from red blood cells, which is active against a wide range of Gram-positive and Gram-negative bacteria.

To prepare the blood antibiotics these workers drew blood samples from men, cattle, dogs, rabbits and chickens. The samples were allowed to coagulate. The clots were then separated from the serums, triturated in distilled water and lyophilized. The desiccated material thus obtained was suspended in phosphate buffer solution containing trypsin and incubated for five hours at 37°C. The digest thus obtained was then inactivated by heating to 65°C. for 30 minutes. Similar hydrolysates were made from commercial bovine hemoglobin powder. The resulting clear dark brown tryptic digests were tested quantitatively for antibacterial properties by spot dilution methods on glucose agar plates. With the bovine blood antibiotic the tests showed complete growth inhibition for such organisms as *Staphylococcus aureus*, *Sarcina lutea*, *Streptococcus viridans*, *Bacillus anthracis* and *Escherichia coli*. There was a slightly less pronounced inhibition with human and canine blood antibiotics. Only partial inhibitions were recorded with chicken antibiotic. These antibiotics were nontoxic even when repeatedly injected intra-abdominally in large doses into mice or guinea pigs. It is believed that the active principle in blood antibiotics is a peptide-amino acid complex.

TAC for Peptic Ulcer Pain

The promising application of vagotomy to the therapy of peptic ulcer, say P. B. Binter and T. J. Rankin (*Ann. Int. Med.* 33:694, 1950) has stimulated the study of pharmacologic agents capable of depressing vagal activity. One such drug is the quaternary ammonium compound, tetraethyl ammonium chloride, often designated as TAC. In their investigations, 27 patients were treated with the drug. All cases of proved peptic ulcer with severe pain responded to intramuscular administration of TAC in 500 mg. doses with immediate relief of pain. This response could be elicited as often as necessary to maintain each case pain free for the duration of the use of this drug.

Binter and Rankin feel that their report demonstrates the usefulness of TAC as an agent for relief of the severe pain of peptic ulcer. In the use of the drug no side reactions of sufficient degree to be troublesome were encountered. Slight blurring of vision, slight lowering of supine blood pressure, and absence of perspiration were consistently present, and varied in duration from one to two hours. Marked postural hypotension rarely lasted over 30 minutes, and the erect position could be safely resumed in one hour. The majority of patients noticed some discomfort at the site of the injection, but felt it insignificant in relation to the relief of ulcer pain. Incorporation of 0.5 to 1 per cent Novocaine with the solution of TAC will materially reduce pain at the site of injection when troublesome. No correlation of the effect of TAC upon medical healing of peptic ulcer is warranted. However, the immediate and maintainable relief of pain obviously promotes the rest of the patient, and permits the therapist to pursue other efforts to healing of ulcer with greater facility.

Terramycin Comparison

In a comparative study, C. A. Werner, V. Knight and W. McDermott (*Proc. Soc. Exper. Biol. & Med.* 74:261, 1950) determined the absorption, distribution and urinary excretion of terramycin, aureomycin, and chloramphenicol in humans. All three drugs were readily absorbed after oral administration. The maximum serum concentrations attained after oral doses of 50 mg. per kilogram were 25 to 50 micrograms per cc. for chloramphenicol, 12 to 16 micrograms per cc. for terramycin and 3.3 to 12.5 micrograms per cc. for aureomycin. Measurable concentrations of the compounds were obtained in the cerebrospinal fluid and in other body fluids when sufficiently large doses of the drugs had been administered. Urinary excretion of the three substances in biologically active form was similar, and high concentrations of drug were attained in the urine. It is recognized that studies of the concentrations of an antimicrobial drug which are attained in the blood may bear only a loose relationship to the therapeutic results which will be achieved with that drug. Nevertheless, the results of such studies can serve as a guide to the dosage regimens. The persistence of measurable serum concentrations of terramycin for six hours and longer after single doses and the high serum concentrations attained when 1 to 1.25 Gm. maintenance doses of drug were given at six hour intervals indicate that total daily oral doses of 4 to 5 Gm. will provide satisfactory drug concentrations in the body in terms of the in vitro sensitivities of the various microorganisms against which terramycin has been demonstrated to be effective.

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READERS' QUESTIONS

HAIR LACQUER: We are in need of a top-notch formula for hair lacquer. Will you advise along these lines? Washington.

A standard preparation of this sort consists of:

Bleached shellac	**10.0 parts**
Hot water	**68.0 "**
Borax	**2.0 "**
Eau de Cologne	**30.0 "**
Dye	**Sufficient**

Dissolve the shellac in the hot borax solution, cool, and then add the perfume.

HAIR STRAIGHTENER: I am using a preparation containing petrolatum, sheet paraffin, ceresin, castor oil and very heavy mineral oil for straightening the hair of my customers. However, it leaves the hair with a dull look and people wish to have a sheen. Can you give me something which will help, or can you tell me which one of my ingredients is at fault? New York.

Frankly, I do not know which ingredient is at fault in your formula, hence I would suggest that you try something along the following lines:

Yellow petrolatum	**6 oz.**
Yellow beeswax	**1 oz.**
Peanut oil (refined)	**2 oz.**
Perfume oil	**sufficient**

Melt the petrolatum in double boiler and add the other ingredients. The perfume should not be added until the mixture begins to solidify around the edges. This is an amber product. If a water white product is desired, use white petrolatum and white beeswax and substitute equal parts of deodorized castor oil and mineral oil for the peanut oil. Vary the proportions as required to meet your needs.

PINE OIL CONCENTRATE: Will you please provide me with a formula with a pine cleanser disinfectant, such as are added to water for cleaning, deodorizing and the like. New Rochelle.

I think a product such as you wish is described in the "National Formulary" under the title Pine Oil Emulsion Concentrate N.F. This is a concentrate prepared from pine oil and water, using soap, sulfonated oil, or other suitable emulsifying agent. Pine Oil Emulsion Concentrate contains not less than 65 per cent, by volume, of pine oil and not more than 10 per cent of water.

Pine oil disinfectants are commonly made according to the Hygienic Laboratory formulas follows:

Pine oil	**1000**
"I" wood rosin (acid number—165)	**400**
Sodium hydroxide (25% solution)	**200**

If desired, a vegetable oil soap base may be used to make such a product as follows:

Vegetable oil soap base	**20 per cent**
Pine oil	**80 " "**

FOOT POWDERS: We are trying to locate a formula that appeared in your magazine about three years ago. It was a foot powder and contained, among other things, salicylic acid, boric acid and talc.

Recently, we also noticed an article on the use of antihistamines in the treatment of athlete's foot. We would like to know if you have any information on this subject which we could obtain. We now put out a preparation for athlete's foot and would like to know if the antihistamines could be used in our present formula or if we could make up a new formula? Mechanicsburg.

I have checked our index back to 1946 and the closest approach I come to what you want is a foot dusting powder originally given by Ingram in the British Journal, *The Practitioner*, as consisting of 5 per cent of sodium hexametaphosphate and 2 per cent of salicylic acid in a mixture of equal parts of zinc oxide, talc and boric acid.

With regard to your second question, I would suggest that you check the article on antihistamines which appears in the November issue of Drug & Cosmetic Industry. You will note that it cites work which indicates that certain of these drugs are also useful as fungicides and therefore, may have a place in the preparation of athlete foot remedies.

ANTIPRUITIC LOTION: I am looking for a lotion, preferably one of the emulsion type, that can be used to combat itching. It seems to me that phenol is often present in such products to act as one of the effective antipruitic agents. Can you provide a formula? New Orleans.

A preparation such as you wish, suggested by a well-known dermatologist, consists of:

Liquefied phenol	**0.6**
Menthol	**1.2**
Glycerine	**6.0**
Zinc oxide	**8.0**
Neocalamine, prepared	**4.0**
Cotton seed oil	**40.0**
Tragacanth	**2.0**
Water, sufficient to make	**100.0**

Soak tragacanth in water to make mucilage; mix the liquefied phenol, menthol and glycerine to form sludge; incorporate mixture of powders and agitate with cotton seed oil by mechanical means until smooth. Directions for application: Apply to affected parts.

PERFUMER'S SHELF

Correction

It is regretted that an article on carbinols and their esters, abstracted on page 544 of the October 1950 issue, was credited to the wrong publication. The condensation was prepared from a review originally published in *Manufacturing Chemist*.

Odor Value Terminology

In a paper delivered before the Division of Chemical Literature at the 118th meeting of the American Chemical Society, Paul G. Lauffer and E. Sagarin discussed the need for more general inclusion of adequate descriptions of odor in the chemical literature. They also noted the value of such data to many chemists. The past and present tendency to report odors in vague terms or not all was attributed in part to the lack of any generally accepted system of classification, and to the difficulty many individuals experience in recognizing an odor sensation as similar to one previously sensed, or in recalling the descriptive names of enough odor standards. Proposed systems of odor classification were reviewed, but because none rests on a firm, objective basis, no recommendation is made for the general use of any classification system by chemists. Lists of descriptive terms were given which should be useful to chemists in connection with odor description. Prominent in this connection were the sets of descriptive terms for odors adopted by the Society of Cosmetic Chemists in December, 1949, as follows:

1. Terms based on groups or classes of natural materials, such as: flowery, fruity, acidic, minty, nutty, spicy, resinous, herbaceous, balsam, tarry, earthy, grassy, musty, cheesy, animal, fishy, fecal, carrion, alliaceous.

2. Terms based on familiar, specific natural materials, such as: lilac, violet, hawthorn, rose, lemon, vinegar, banana, peppermint, wintergreen, almond, walnut, maple, rum, clove, nutmeg, cinnamon, spruce, turpentine, parsley, thyme, camphor, vanilla, smoke, tar, earth, grass, mold, cheese, goat, cat, fish, urine, feces, carrion.

3. Terms based on familiar chemical compounds, such as terpineol, ionone, anisic aldehyde, phenylethyl alcohol, citral, acetic acid, amyl acetate, menthol, methyl salicylate, benzaldehyde, amyl alcohol, eugenol, cinnamic aldehyde, isobornyl acetate, pinene, thymol, camphor, vanillin, coumarin.

Also included are p-cresol, guaiacol, o-xylene, bromine, butyric acid, caproic acid, trimethyl amine, ammonia skatole, allyl sulfide, ethyl mercaptan.

New Essential Oil Specifications

At the December 7, 1950 meeting of the Scientific Section of the Essential Oil Association of U. S. A., specifications were established for the following materials: amyl cinnamic aldehyde, oil of geranium, methyl phenyl carbinol, methyl phenyl carbinol acetate, oil of Siberian fir needles, oil of geranium Reunion, linalool from bois de rose Brazilian, phenyl propyl alcohol aldehyde C-12 laurie, aldehyde C-12 MNA, oil of cinnamon leaf and oil of clove leaf. Standards were also adopted for testing gums and resins of vegetable and animal origin. Still pending are specifications for American oil of dillweed. Specifications will also be developed for ionone and methyl ionone. The problems on oil of coriander are still under investigation.

Balsam of Peru

In a brief review of balsam of Peru appearing in *The Perfumery and Essential Oil Record* (41:218, 1950) attention is called to the fact that *Balsamum peruvianum* continues in the latest editions of the *British* and *United States Pharmacopoeias*. This indicates that it serves some useful purpose in pharmacy, but no specific medicinal properties are claimed for it, although its official dose is given as 5 to 15 minims. Its employment as an antiseptic is not made use of to any great extent, but its addition to some ointments and skin preparations have shown that it acts better as a preservative then benzoin, and it might well have become a more efficient addition to lard for ointments than the benzoated lard which was for so long employed in medicine.

The balsam is not a natural secretion of the tree *Myroxylon pereira*, but is collected after beating and damaging the bark on the tree trunks and then scorching the damaged surfaces and covering them up with rags or cloth, which absorb the secretion produced by the injuries. These rags are subsequently pulled off the trees and placed in hot water, on the surface of which the balsam rises and can be drawn off and strained.

Peru balsam contains from 50 to 60 per cent of an oily colorless aromatic liquid and about 20 to 30 per cent of a dark resinous substance. The liquid portion, known as cinnamein, is a mixture of benzyl benzoate and benzyl cinnamate. The resin is peru resinotannol. The sweet odorous nature of the balsam is due to a body which has been named peruviol. With such ingredients it is not difficult to imagine the possible admixture of synthetic ingredients and other esters. It is therefore stipulated that good quality balsam shall not contain more than 50 per cent of balsamic esters.

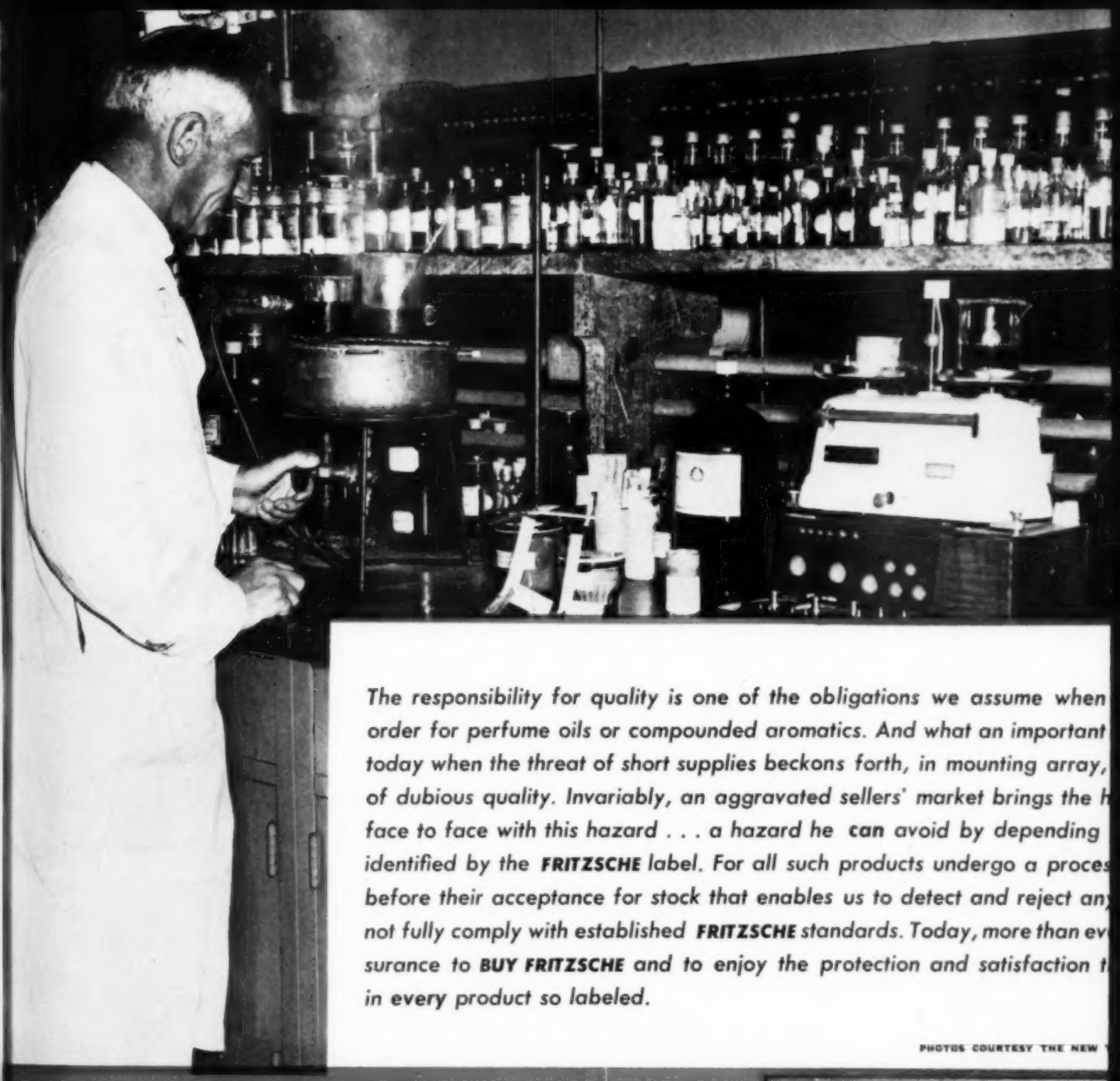
Basil Oil from Tanganika

Y.-R. Naves (*Perf. & Essent. Oil Rec.* 41:286, 1950) has examined an essential oil produced in Tanganyika from *Ocymum basilicum* var. *purpurascens*, which grows there in abundance. Its characteristics were the following:—

Specific gravity	**0.9558**
Index of refraction	**1.5175**
Specific rotation	**+1.24°**
Carbonyl index	**11.3**

A closer examination of this oil discloses the presence of terpenes (notably D.α-pinene), cineol and linalool in small proportions, and, as was to be expected from the odor of the oil and the analysis by Zeisel's method, 80 to 85 per cent estragol. It was possible to obtain this ether quite pure by distillation. None of the fractions of estragol developed the odor or taste of anethol, neither did they possess a camphor-like odor. Mixed with 60 per cent of its weight of linalool, this oil made a very acceptable substitute for the European oil for all the purposes for which the latter is used.

Naves also points out that the camphor-like odor is not noticeable in the basil of these Islands until after the flowering period and in the older leaves. This point must be kept in mind when distilling samples.



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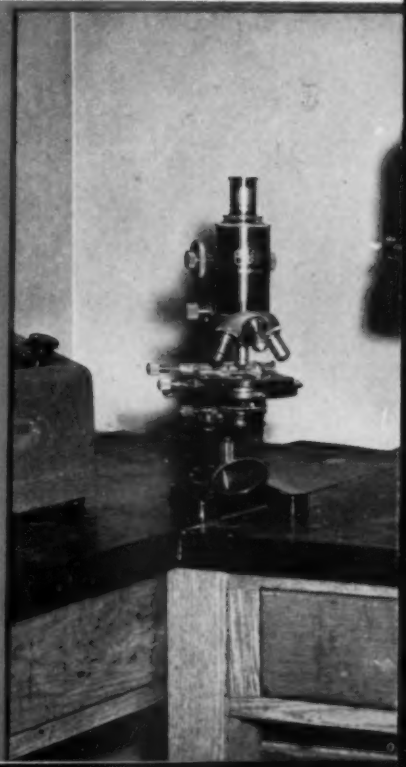

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WHAT CAN WE DO TO HELP MAKE 1951 A BETTER YEAR?....

THE answer, we believe, may be found in that small, two-letter word in our caption . . . the word *"WE."* Think about it for a moment. . . . Ponder the incredible power it can generate if we, as individuals, multiplied a millionfold, will use it with deliberation and purpose to bring about a oneness of spirit . . . a sense of unity and cooperation . . . a feeling of participation and belonging in the great effort we must make in the months ahead if Freedom, as we know it, is to survive. The application of this "we" feeling has no limits. In relation to home and family, it is basic. There, it needs no encouragement. But beyond . . . to the community in which we live, to the organization for which we work, to the country of which we are citizens, the cultivation and practice of this attitude of being one with the rest, of pulling together in a common effort is, perhaps, the most needed force in America today. On every side we see the hands of Disunity sowing seeds of Hatred, Criticism and Distrust where, instead, the flowers of Friendship, Cooperation and Good Will could be developing in beauty and abundance for all. To prevent these weeds from overrunning and destroying our garden, we *must* fight together, till and cultivate the soil together and work together unitedly, one for all and all for one. It is now *WE,* the People—and only *we*—who can decide whether the fateful year of 1951 is to be one of hopeless dispair . . . or hopeful repair. By denial of self in the interests of all, by thinking in terms, not of *I* but of *WE,* the outlook for 1951 can be transformed from one of dismal failure to hope and security for us—and with genuine cooperation of other Peoples—peace for all the world.

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Remarks: If you're seeking a unique note for your new perfume, this could be it. Suggest you explore its possibilities. Use of 10 to 15% will give striking results.

LILY OF THE VALLEY #19175

For Use In: Colognes, toilet waters and extracts.

Odor Type: A delicate, subtle floral odor that suggests a lovely Muguet note, pleasant and perfumey in character.

Remarks: For good results in colognes and toilet waters, recommend using 4 ounces of this oil to each gallon of 75% alcohol. For extracts, use 20-24 ounces per gallon of finished extract.

ALDEHYDE MODIFIER #20219

For Use In: Perfumes and toilet waters.

Odor Type: An aldehyde top note with soft, velvety effect.

Remarks: If your perfume or toilet water is lacking a strong, diffusive lift, the addition of 5% of this Modifier will usually produce the desired effect.

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Oil of Backhousia Anisata

The foliage of the myrtaceous tree, *Backhousia anisata*, reports H. H. G. McKern (*J. Proc. Roy. Soc. N. S. Wales* 83:44, 1950), yielded on steam distillation 0.5 per cent of a pale yellow oil strongly resembling anise oil in both odor and taste. Two samples had the following characteristics:

	1.	2.
Specific gravity	**0.9826**	**0.9806**
Index of refraction	**1.5535**	**1.5489**
Specific rotation	**–1.15°**	**–1.88°**
Freezing point	**14.5°C.**	**12.0°C.**
Melting point	**15.2°C.**	**13.2°C.**
Ester number	—	**15.4**
Ester number, after acetylation	—	**87.6**

Both samples were soluble in one volume of 90 per cent ethyl alcohol. The oil contained 60 per cent anethole as compared with about 80 per cent for anise oil. By rectifying or freezing *B. anisata* oil, a commercial equivalent of anise oil could be prepared and would provide a local source of anethole.

Mechanism of Fixation

Writing in the new publication, *The International Perfumer* (No. 2, 1950, p. 21), R. W. Moncrieff states that one of the essential characteristics of a perfume is that it shall be lasting. In order to impart this quality, there are two difficulties which must be overcome; namely: A. Too rapid volatilization of the perfume with consequent lack of lasting properties or persistence. The perfume rapidly loses its strength when worn. B. Different rates of volatilization of the ingredients of a perfume with consequent change in quality of odor during use. The characteristic odor of the perfume will change; doubtless it will deteriorate during use.

In discussing the historical background of methods for improving the lasting quality of perfumes, Moncrieff notes that this property of increasing the persistence of an odor was known as "fixing" the odor, and the substance such as musk or civet or sandalwood oil which performed this duty was known as a "fixative." This name is still the most generally used and is to be preferred. The discovery of fixation was made empirically, but it is surprising that although fixatives have been used, and their qualities appreciated as far back as the history of perfumery is known, there is even to-day some uncertainty as to exactly how fixatives perform their task.

The earliest and probably still the best fixatives, like musk, civet, ambergris and castor, brought to the perfumer not only the advantages of greater persistence, but other valuable qualities as well. Hence, it is reasonable to expect that a fixative will serve the following purposes: A. To increase the persistence of a perfume, so that it will be long lasting. B. To maintain the quality of odor of the perfume unchanged—to compensate in some way for the differences in volatility of the various components of a perfume. C. To blend the odors of the perfume into one which is characteristic of that perfume, to subdue the individual notes of the separate components and to build up the composite whole in which it may be difficult, or even impossible, to detect olfactorily the original individual notes. D. To add a distinctive note to the perfume, due to the fixative itself being powerfully and pleasantly odorous.

The first three of these four functions are truly those of a fixative; it must confer persistence on a perfume, it must blend the odors of the individual components and it must confer some resistance to change of odor due to unequal rates of evaporation of the constituents in the perfume. The fourth function, that of adding a distinctive olfactory note, is however not an essential property of a fixative, but one that is adventitious. It so happens that the most widely used fixatives, those like musk and civet, possess fine and powerful individual odors of their own, which on dilution at least are very pleasing. Some of the oils, such as those of patchouli and sandalwood which are both used as fixatives add their own odor to the perfume. This, however, may be considered as fortuitous, for there are other substances which have only mild, or even negligible, odorant properties, only very faint smells, which can nevertheless exhibit fixative properties; such as benzyl benzoate.

In considering the means by which these materials produce their effects, Moncrieff observes that fixatives volatilize slowly and they also slow down the volatilization of the lighter components of a perfume. Probably to some extent they do this by mechanical interference, the sluggish molecules of fixative are continually getting in the way of the lighter molecules; the efforts that the lighter molecules make to leave the liquid phase and escape into the air are constantly frustrated by collisions with the slow moving fixative molecules. This is probably one way in which fixatives carry out their function, by colliding with and impeding the molecules of the lighter components of a perfume, but there is doubtless another and possibly more important way in which fixatives can act, one which provides the main mechanism of fixative properties.

This last refers to the chemical union of fixative and perfume. A consideration of the chemical constitution of the substances mostly used as fixatives shows that they are characterized by the possession of strongly polar groups such as carbonyl and nitro in which elements are functioning at less than their full valency. These groups are capable of forming labile associations, dependent on their residual affinities with other perfumery ingredients. Possibly too, hydrogen bonding may play a part in the development of such associations. Such a loose form of combination between fixative and odorant material would of course ensure that as long as there was any fixative present there would also be some of the volatile constituents. In other words, the rate of evaporation of at least a part of the volatile constituents would be reduced to that of the fixative and their persistence would be correspondingly increased.

This and other evidence points to the formation of some loose form of chemical association between the fixative and the other ingredients, the volatile parts, of the perfume composition.

If these considerations hold true, a substance must have the following characteristics in order to have useful fixative properties: A. It must have a low vapor pressure, preferably of the order of 0.0005-0.005 mm. mercury, so that it evaporates only slowly. B. It must contain reactive groups, such as the carbonyl group found in ketones, esters and lactones or as the nitro group found in the nitro-musks. C. It must through its possession of the reactive groups, be capable of forming loosely bound addition products with the more volatile perfumery components. D. It must not have a disagreeable odor, or one that will not harmonize with the volatile constituents. Although the most widely used fixatives themselves have attractive odors which add to the value of a perfume, the act of fixation does not require that the fixative shall itself contribute to the odor of a perfume, and it is quite possible for a good fixative to be odorless.

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ABREAST OF THE MARKETS

ESSENTIAL OILS AND BOTANICALS ADVANCE FOLLOWING SETBACK IN KOREA; QUICKSILVER, GLYCERINE HIGHER

The markets jumped into another tailspin during the second half of November, following the launching of the "Home by Christmas" offensive by the UN army and the intervention of the Chinese Red forces. The first reaction of the dealers was the exhibition of extreme caution and hesitation in either buying heavily or selling large quantities of material. Even after it became evident that replacements would be increasingly difficult to acquire from the Far East, and even after a large number of essential oils and chemicals had advanced to higher levels, still dealers were reticent to stock up too heavily until the inventory period had passed.

The general price of essential oils by December had reached the highest point since 1946, as represented by the graph on page 103 in which the price index is plotted at 153.9. Botanicals had been sluggish all year, but even they were inching up to the index of 218 from which they had tapered off a year ago last June. The cosmetic raw material index, now set at 149.2 is the highest it has been in over twenty-three years, and it is now almost twice as high as in 1927 when it was 80. In 1944 it was 120, and at the end of 1947, about 130. The materials mostly responsible for this high index figure include alcohol, balsam copaiba, balsam peru, balsam tolu, glycerine. and menthol, all of which have been exceedingly active in the last six months.

The medicinal chemicals index, which hit a 183-high index in 1947, dropped precipitously to 117 by January of 1950. By the end of the year, the figure had jumped up equally as fast to the level of 145. Among the most active items of the medicinal chemicals list are alcohol, menthol, and quicksilver, the latter having reached $125 by the last week in December, or almost twice as much as the $71 level of six months ago. The mercury price is advancing so rapidly, in fact, that the $125 quotation will probably be outmoded by the middle of January.

Following the freezing of all Red Chinese assets in the United States by this country on December 16 and a previous embargo on US exports to China, the Chinese retaliated by imposing embargoes on all exports to this country on the 18th. By this time materials of eastern origin were shrouded in confusion. Menthol prices jumped higher from day to day, making it impossible to quote a definite figure on the price, which at the first part of January ranged between $13 and $13.50. The entire menthol situation is very precarious, with increasing emphasis on Japan and Brazil as sources of the material.

As far as foreign botanicals were concerned, interest in them continued to increase by the end of December, with buyers becoming more anxious to stock up before replacement costs rose too high. The prime example of the plight of eastern botanicals is that of rhubarb, which was shut off from China in November, after six months of war. Chief difficulty in this field is that no one knows where the outbreak of hostilities is going to strike next.

Several spokesmen in the trade have indicated that if a major war should develop, the industry will fall back on synthetic products, just as it did during World War II. However, it is felt the reliance on synthetic preparations will be more strained this time, as new processes have been developed which produce different by-products from those obtained previously.

One example of the importance of replacements is that of anisic aldehyde, which, according to the U. S. Tariff Commission, increased eighty-six per cent in the two-year period ending in 1949.

As far as the chemical market is concerned, numerous materials advanced in price during the latter part of 1950, mostly because of increased production costs and because of increased prices in raw materials.

• Prices quoted in this section were current on the first of this month.

Glycerine Becoming Tighter

Glycerine advanced slowly during December and toward the end of the month was quoted anywhere from 55¼c to 65¾c, depending on the seller. All during the month demand for the item increased much faster than the available supply, mostly because the DO (Defense Orders) rated orders were becoming more numerous as defense preparations mounted. The DO orders are expected to increase rapidly in 1951, without a corresponding increase in production, which will result in a very tight market.

Coupled with the voracious demands for glycerine, both in industry itself and in the mobilization program, is the synthetic detergent factor. The greatly enlarged use of synthetic detergents has cut into the production of soap, thereby reducing the production of by-product glycerine.

Although the Shell Chemical Co., has raised its synthetic glycerine production by 50 per cent, sources in the trade have expressed the belief that this will not relieve the situation very much, in view of the rapidly expanding demand. This greater glycerine output, it is estimated, will increase the general supply of the chemical by about 40 per cent.

Synthetic glycerine production has been maintained at about 35,000,000 pounds a year, according to one source, and the additional supply will boost this figure to about 50,000,000 pounds.

Quicksilver Price Higher

Quicksilver continued its rapid climb last month, reaching $125 a flask, which was $18 higher than the price in November. The material was entering the United States from Spain only and in lesser quantities than had been hoped for.

As yet no metal has been received from Italy, where the mines are virtually closed to foreign buyers. No one knows at this time whether the Italian government will countenance expansion of the mines in the near future in view of the worsening international situation.

(*Continued on page 102*)

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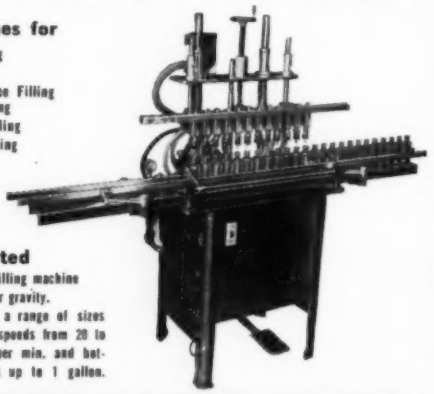

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CHINESE MENTHOL SUPPLY SERIOUSLY CURTAILED; SHORTAGE DEVELOPS IN CARNAUBA WAX; COD LIVER OIL UP SLIGHTLY

Toward the end of December menthol had reached $13 and appeared to be racing on toward the $14 mark. The abrupt turn of events in Korea, added to the U. S.—Chinese economic troubles and embargoes, suddenly made menthol very scarce. As one dealer put it, menthol was very plentiful up to the time in mid-December when Red China placed an embargo on all exports to America. The day after it happened, there was just nothing to be had.

To make matters worse, dealers in this country could extract no guarantee from the Chinese shippers that cargoes of menthol would arrive safely after leaving the Chinese coast. There were reports of frequent losses of material, or long delayed shipments. The situation had become chaotic by the first part of January.

Owing to the critical conditions in the East, very little menthol is being shipped from China to the United States. There is little hope for relief from Japan, as that island has on hand only very small quantities for foreign shipment.

Brazil, which is the only source of menthol left, and which has been sending most of its material to European countries, may conceivably be more responsive to American buyers in the future. Since the United States has imposed an embargo on Chinese exports, this Communist government may attempt to enlarge its menthol trade with England. If this should occur, England will necessarily reduce its menthol trade with Brazil. As a chain reaction, this may cause Brazil to become more understanding toward the American market and offer more favorable prices to the dealers in this country.

Shortages Develop in Waxes

Five different waxes advanced during the month, the most abrupt change taking place in refined ouricury which shot up 16c from the previous figure of 84c to the current $1. This advance followed on the heels of carnauba wax, which was up 9c to $1.14 for the No. 1, up 13c to $1.08 for North Country No. 3, and up 15c for the refined No. 3, to $1.08.

The advance in carnauba stemmed directly from the barter agreements of last summer when the Brazilians went overboard on commitments in order to get as much machinery as possible from the United States. South American dealers reportedly promised more material to American buyers than they could deliver, hoping future stocks would see them through. When the barter agreements were terminated, the exporters still had many unfilled orders on hand. This situation has become more critical with each month and only now is resulting in carnauba shortages.

Other waxes which advanced in December include white beeswax, now quoted from 73c to 77c, candelilla, from 67c to 69c, and ceresin, from 14c to 28c.

Cod Liver Oil Stocks Light

Cod liver oil was higher by five cents in December, being quoted from $1.80 to $1.90. Spot supplies are reported on the light side, but this is bolstered by the fact that the new fishing season is getting under way now in Norway.

Little oil was carried over from the previous season in that country because large amounts were sold to European countries.

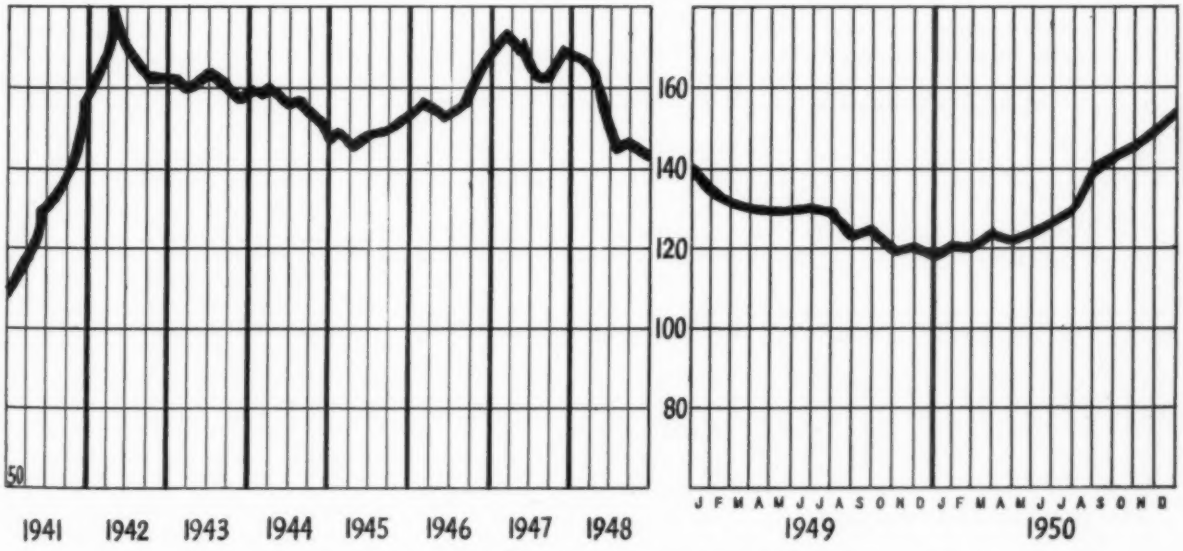
Tartaric Acid Up Again

Tartaric acid and other tartar products advanced once more last month, as manufacturers attributed the rise to increased production costs. Drums of 250 pounds and 230 pounds are quoted at 40c, and 100 lb. drums, at 41c. Cream of tartar went up 3c to 35c per pound for a drum and 36c a pound for 100 lb. drums. Rochelle salt U.S.P. advanced 2c for a 250 lb. drum to 34c, and to 35c for a 100 lb. drum. Tartar emetic U.S.P. is now quoted at 61c a pound for a 250 lb. drum and 57c for a 100 lb. drum, and seidlitz mixture at 31c for a 250 lb. drum and 32c for a 100 lb. drum.

Geranium Oil Still Very Firm

Bourbon geranium oil remained in the range between $28 and $36 last month and appeared in a tighter position than the Algerian oil.

50 Raw Materials—Weighted Price Index. 1926 = 100.



The price index of fifty commodities for December advanced from 149.1 to 154.5.

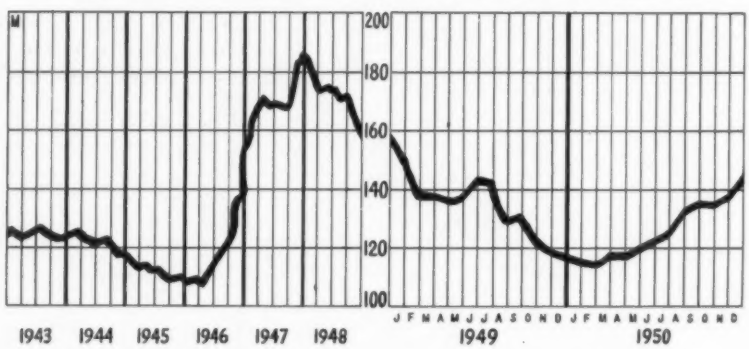
DECEMBER PRICE CHANGES

UP

Acetylsalicylic Acid 3c
Alcohol, denatured No. 1 spec. 4c
ethyl USP 190 proof 54c
Anise Oil USP 35c
Arabic Gum, White, No. 1 1c
Balsam Copaiba S. Amer. USP 10c
Balsam Peru 15c
Balsam Tolu 75c
Beeswax, White, 4c
Birch Oil, Southern $1.20
Sweet, Northern 75c
Bois de Rose, Brazilian 55c
Cananga Oil, Native $1
Candelilla Wax 4c
Caraway Oil 50c
Carnauba Wax No. 1 9c
North Country No. 3 13c
Cedar Leaf Oil 40c
Cedar Wood Oil 10c
Ceresin Wax 1c
Citronella Oil, Ceylon 15c
Java 40c
Cod Liver Oil USP 5c
Cream of Tartar 3c
Ergot 40c
Eucalyptus Oil 22c
Glycerine, CP 5c
Grape Fruit Oil 35c
Hemlock Oil 50c
Henbane Leaves, USP 5c
Hexamethylenetetramine 1c
Lavender Spike Oil 75c
Lemon Oil, Calif. 25c
Lime Oil, Dist. 50c
Magnesium Stearate 2c
Menthol, Natural $1.50
Mercury $18
Nutmeg Oil 40c
Orange Oil, Amer., Cold Pressed 55c
Amer. Distilled 15c
Ouricury Wax 16c
Peppermint Oil, Natural 25c
Redist. 50c
Petit Grain Oil, S. A. 50c
Phenobarbital 50c
Pine Needle Oil 25c
Rochelle Salt 2c
Safrol 20c
Salicylic Acid 2c
Salol 5c
Seidlitz Mixture 1¾c
Sodium Salicylate 2c
Spearmint Oil 65c
Spruce Oil 50c
Tartar Emetic 2c
Tartaric Acid 3c
Theobromine $1.25
Wintergreen Oil $1.15
Zinc Stearate 2c

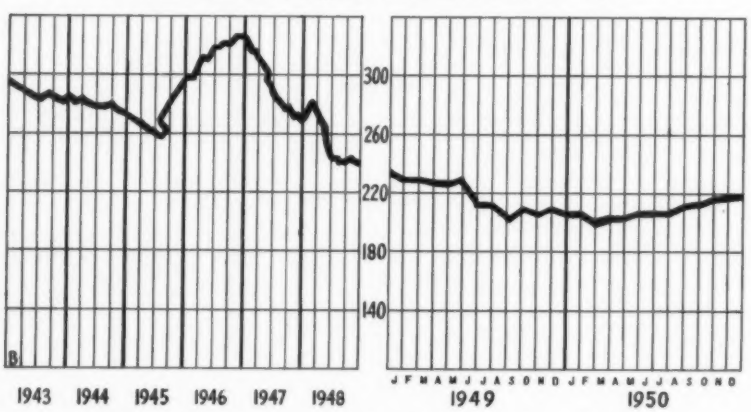
In September of last year, the shipping price of the oil was six or seven times as much as that of 1947, while two months later, in November, it declined to four or five times that of 1947. This recent decline, however, is considered by sources in the trade to be only temporary. One long-range prediction has been offered to the effect that substantially lower prices may possibly occur in the Reunion oil during 1952, although no decline is expected this year. World conditions being what they are, the situation may change overnight in the Far East.

15 Medicinal Chemicals—Weighted Price Index. 1926 = 100.



The medicinal chemicals index advanced from 138.0 to 145.4. Alcohol, cod liver oil, cream of tartar, menthol, and mercury were higher.

15 Botanicals—Weighted Price Index. 1926=100.



The botanicals index advanced from 217.4 to 218.6. Balsam tolu and ergot went up.

Quicksilver Price Higher

(*Continued from page 99*)

At the same time, mines in the United States were still mostly all closed down, and probably will remain that way as long as the metal is available from foreign sources. Total imports of the metal for 1950 were estimated to have been close to 55,000 flasks. During the previous year, 80 per cent of the 100,000 flasks imported were diverted to the government stockpile.

Ergot Very Scarce

One source quoted ergot in the range between $5.50 and $6.00 in December, and even this was doubtful because the material is hardly obtainable.

Exports of ergot from Portugal during the first 8 months of 1950 totaled 90,545 kilograms valued at 20,301,358 escudos ($709,836), compared with 92,128 kilograms valued at 6,692,584 escudos ($234,000) for the similar period of 1949. Exports from Portugal to the United States from January through September of 1950 amounted to 96,642 pounds ($207,722) and for the like period of 1949 were 90,714 pounds ($102,015).

U. S. Imports More Crude Botanicals in 1950

The United States imported a larger amount of crude drugs during 1950 than in the same period of 1949, according to *Foreign Commerce Weekly*, which gives the following figures in respect to four crude botanicals. Together they had a total import value of $6,097,987 for 1950 against $3,973,983 in the 1949 period. These included opium, 521,687 pounds valued at $3,922,459 (194,604 pounds at $1,848,741 in 1949); licorice root, 30,158,311 pounds, $1,034,962 (30,762,907 pounds, $1,172,337); psyllium, 2,449,791 pounds, $626,388; and ergot, 92,519 pounds, $336,823 (137,069 pounds, $162,020).

Citronella Oil Up

Citronella oil prices were forced higher during December as offers from the origin tapered off. Spot prices climbed 15c to the range between $1.75 and $1.85 for the Ceylon variety and 40c to the range between $2.40 and $3.00 for the Java oil. The Java-type oil originating in Formosa was being sold almost under duress, according to one source, as new offers were being raised to such a high figure as to discourage outright additional purchases.

Some quarters believe a shortage will

appear in the oil in the immediate months ahead, for the new crop will not be ready before springtime.

Lemon Oil Higher

The inside price of the Italian lemon oil remained at $4 but advanced to $7.50 and, in some quarters, to $8 on the outside. Additional advances were expected, although it was said that there was more Italian oil on the spot market than there was California oil. The American oil advanced last month by 25c to the range between $4.25 and $4.50.

Eucalyptus Oil Growing Scarce

Owing to an increasing scarcity in the oil, eucalyptus advanced 22c last month from 78c to $1. Stocks are reported to have fallen off greatly, with very little being offered from the origin, Australia, although this is the normal producing season.

The United States received 38,085 pounds of oil in September, valued at $34,414. Of this amount, 24,108 pounds were shipped by Australia.

Nutmeg Oil Up 40c

Replacements in nutmeg oil were becoming more difficult to fill by the end of last month, when the prices advanced to $4.25 on the inside and $4.75 on the upper end of the range. Spot material was said to be small, and shippers were said to be delaying for higher prices.

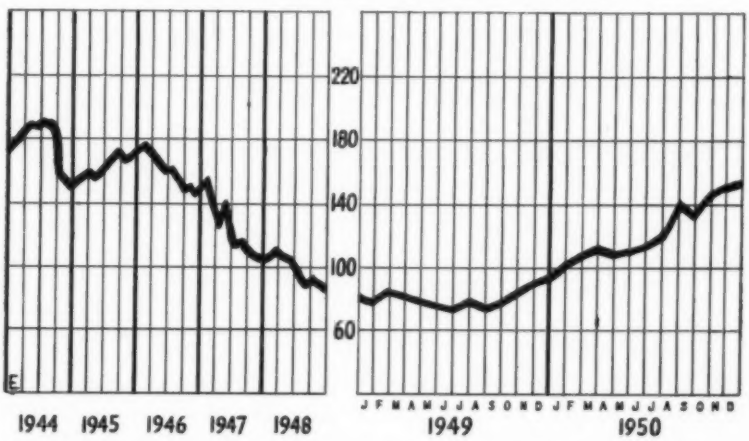
Peppermint Oil Stronger

Both the natural and redistilled peppermint oils advanced last month, as reports were received that farmers were holding back on the orders to await higher quotations. The natural oil is quoted from $6.75 to $7.25, and the redistilled, from $7.50 to $8.00.

Anise Oil Up Sharply

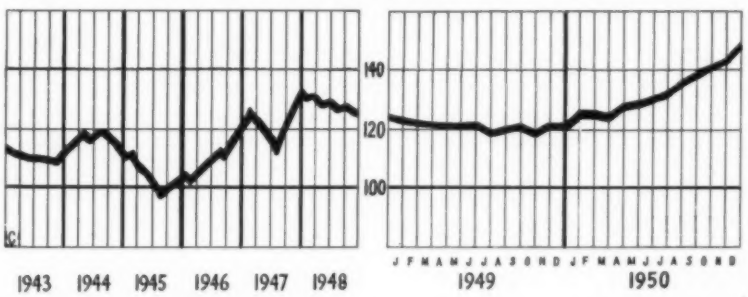
With anise oil prices ranging between $1.75 and $1.90 last month, the restricted shipping conditions from China seemed to indicate that this item would become much higher in the near future, with supplies in the United States becoming very tight.

15 Essential Oils—Weighted Price Index. 1926 = 100.



The essential oils index advanced from 150.2 to 153.9. Anise, bois de rose, cananga, citronella, eucalyptus, and peppermint oils went up.

25 Cosmetic Raw Materials—Unweighted Price Index. 1926 = 100.



The cosmetic raw materials index went up from 143.5 to 149.2. Alcohol, balsam peru, balsam tolu, beeswax, candelilla wax, ceresin, glycerine, and menthol were higher.

Exports from Taiwan

Exports of essential oils from Taiwan (Formosa) to the United States during September 1950 consisted of 167,940 pounds of citronella oil, valued at $216,520; camphor oil, 12,480 kilograms, $8,037; and sassafras oil, 4,200 kilograms, $4,116.

Clove-Oil Production, Madagascar

Production of clove oil in Madagascar during 1950 is likely to exceed 800 metric tons, according to the foreign press. In 1922, production amounted to only 90 tons.

Orange Oil Set at $2

Orange oil, which at one time last year was as low as 40c advanced to $2 a pound for the Florida brand in December. The California oil was quoted at $2.25. Now that most of the frozen orange juice producers have given up extracting the oil because of the added expense and trouble, the price has completely reversed itself since last year's low. Florida oil production has fallen off considerably.

Salicylates Move Up

Reflecting higher raw material costs, salicylic acid and sodium salicylate advanced in price. The acid was up 2c a pound ranging from 44c to 59c depending on quantity and seller. Sodium Salicylate, up 2c, ranged between 63c and 73c.

Alcohol Remains Tight

Denatured No. 1 special alcohol advanced 4c in December 73½c, in keeping with rising costs in raw materials and manufacturing. As it has been in recent months, demand for the item remained heavy, outstripping the available supplies.

The Alcohol Tax Unit Bureau of Internal Revenue, Treasury Department, has released the following data on the supply, production, withdrawals, and stocks of ethyl, completely denatured and specially denatured alcohol for the month of October, 1950, in comparison with October, 1949.

Production

	Proof gallons	
	1950	1949
Ethyl	40,910,087	22,679,521
*Completely denatured	219,682	1,538,959
*Specially dentured	19,053,166	13,516,873

Withdrawals

	Wine gallons	
	1950	1949
†Ethyl, tax paid	3,422,193	3,935,559
tax free	31,458,396	28,078,273
*Completely denatured	218,286	1,605,267
*Specially denatured	18,509.071	13,865,443

Stocks

	Gallons	
	1950	1949
†Ethyl	36,597,489	43,135,314
*Completely denatured	32,988	786,555
*Specially denatured	1,979,203	5,519,593

†Wine gallons. *Proof gallons.

GUMS
(CRUDE, POWDERED)

Chemicals and Drugs

GUMS:
GUM ARABIC
GUM ARABIC BLEACHED
GUM GHATTI
GUM LOCUST (Carob Flour)
GUM TRAGACANTH
GUM EGYPTIAN
GUM KARAYA (Indian)
QUINCE SEED

CASEIN
•
MENTHOL
(Crystals)
•
JAPAN WAX
•
EGG ALBUMEN
EGG YOLK
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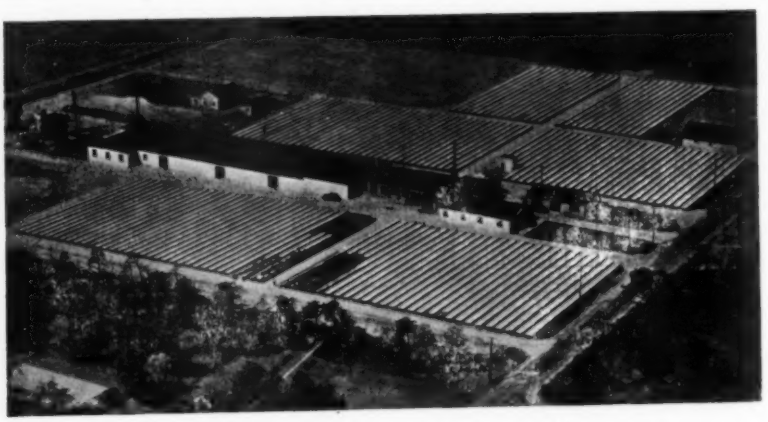

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INDUSTRY'S BOOKS

Handbook of Antibiotics, by A. L. Baron, S. B. Penick & Co., 303 pp., Reinhold Publishing Corp., New York, $6.50.

This manual is an extremely valuable abstract of the literature pertaining to the numerous antibiotic substances which have been isolated and studied to date. It is the first attempt to digest and correlate in a single book all the essential information on these vastly important substances and to organize them in a form suitable for ready reference. The material presented gives in compact form the methods of production, chemistry, toxicology, bacteriology, pharmacology and related information on the most complete list of antibiotics ever published in this way. The bibliographies are all up to date to 1950. Thorough indexes to microorganisms and antibiotics formed are a feature contributing greatly to the use of this book. The arrangement is tailored to the needs of the searcher for information, who will find here an easy and complete guide to the original literature. All the information is factual and impartial. It appears wherever possible in the form of running outlines, tables and statistical summaries boiled down to the basic facts. Individual antibiotics are reported in alphabetical sequence. This treatment, in conjunction with the other features described above, makes this book unique in its field.

Modern Glass Working and Laboratory Technique, by M. C. Nokes, B.Sc. (Oxon), 157 pp., Third Ed., Chemical Publishing Co., Inc., Brooklyn, N. Y., $3.75.

Some measure of skill in laboratory glass blowing is a valuable asset both to the teacher and student of science. The introduction of Pyrex and other hard glasses, together with the improvement in the quality of soda glass, confer a wide range of powers on the laboratory worker, which he has not hitherto enjoyed. In this book instructions are given for the working of these new glasses, the strength and efficiency of the apparatus produced being regarded as of more importance than that excellence of finish which is invariably attained by the professional. The third edition is enlarged, re-set, and contains several new processes and diagrams.

Major Problems of United States Foreign Policy 1950-1951, Prepared by the Staff of The International Studies Group of The Brookings Institution, Washington, D. C., 416 pp., $3 cloth bound, $1.50 paper bound.

This book gives the reader a brief survey of the present world situation, outlining the character of international relations since the end of the war and the efforts made by the major powers to co-ordinate these relations in the United Nations. An account is given of the fundamental and continuing objectives of the United States, Great Britain, and the Soviet Union. The major problems of foreign policy confronting the United States in midsummer 1950 are reviewed. Included in the volume is a problem paper giving a detailed analysis of the security problem facing the United States in southeast Asia, developed in substantially the same way in which such problems are dealt with by officials at the policy-making level of the Government. The volume is illustrated with more than a dozen maps and charts. There are selected references for each problem and a general bibliography. An extensive index is included for handy reference.

Modern Chemical Processes, A Series of Articles Describing Chemical Manufacturing Plants, by the Editors of Industrial and Engineering Chemistry in conjunction with the technical staffs of the cooperating organizations, 222 pp., Illus., Reinhold Publishing Corp., New York, $4.

Contained in this single volume is factually authoritative, detailed information about 23 recently developed American chemical processes operated on a full-scale production level. These comprehensive articles are jointly authored by a competent chemist-editor or chemical engineer-editor of the staff of Industrial and Engineering Chemistry of the American Chemical Society and one or more members of the technical staff of the cooperating organizations. This first book contains 23 plant process articles and every two years 24 more such articles will be made available in book form so that as the series is extended, it will prove a "perpetual inventory of American chemical technology" and the most valuable reference source of its kind available anywhere. Contents: Contact Sulfuric Acid From Sulfur; Modern Production of Chlorine and Caustic Soda; Iodine from Oil Well Brines; Continuous Superphosphate Production; Barium Potassium Chromate Pigment; Fine Chemicals from Coal; Liquid Fuel from Coal; Synthetic Methanol Production; Alcohols by Sodium Reduction; Low Temperature Manufacture of Chemical Rubber; Carotene and Chlorophyll: Commercial Chromatographic Production; Chloroquine Manufacture; Paint and Varnish Manufacture; Petroleum-Base Protective Coatings; Drier Soap Manufacture; Continuous Distillation of Gum Turpentine; Selective Extraction of Vegetable Oils with Furfural; Solvent Extraction of Oil from Soybeans; Phenolic Resin Glues for Plywood; Oxidation of Cellulose; Manufacture of Basic Refractory Brick; Paving Asphalt from California Crude Oil; Citrus Fruit Processing.

Antipyrine, A Critical Bibliographic Review, by Leon A. Greenberg, Ph.D., Associate Professor, Applied Physiology, Yale University, 135 pp., Hillhouse Press, New Haven, $4.

Antipyrine was one of the first synthetic drugs introduced into medicine. Originally used for the "cure of fevers," it did not disappear, as many other drugs employed for the same purpose did, when medicine turned to treating the diseases rather than the symptom. Its survival was due to the discovery that antipyrine was an effective and safe analgesic. The use of antipyrine and research on its effects have given rise to a large literature. The collection of this literature yielded over 1,700 items, incorporated in the Bibliography. The facts provided in the literature have been synthesized in the present review so that they may be available to research workers—in biochemistry, pharmacology, physiology—as well as to clinicians, in a single systematic arrangement. The exhaustive bibliography and the broad subject index contribute materially to this purpose. This work should serve as an indispensable reference tool for all research workers studying analgesic drugs.

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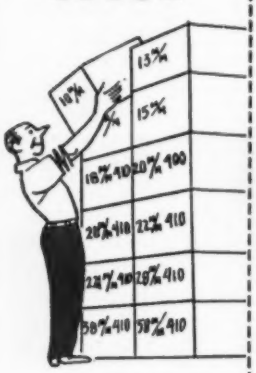

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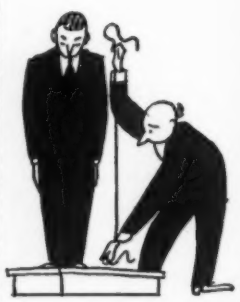

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Socialized Medicine Is No Bargain

(*Continued from page 29*)

human nature were less ornery and less avaricious, an idealistic health program might work out all right. But so long as people have preferences, so long as Park Avenue has more appeal than Hell's Kitchen, there will be an uneven distribution of doctors under any plan that does not contain compulsion. And once compulsion enters the picture, the rights and freedoms of all citizens stand in jeopardy. To me, it is as simple as that. For forty years, I have fought communism tooth and toenail because I do not want anyone pushing me around. I certainly do not want to put my head into a socialization noose voluntarily when the results can be as undesirable as communism.

I have always respected the medical profession for the fine contribution American medicine has made to human welfare. As I watched your battle against regimentation during the past two years, I have added to that respect. The physicians of this country have shown that they are willing to fight for their conviction. I salute you today not only as doctors but as crusading citizens as well. We in the labor movement have our own cross of regimentation to bear. The fight you are making is part of the same war. It is a war against concentration of authority in a few hands in Washington. As a veteran of forty years in the labor movement, I know what it is to fight for human rights. I am happy to take my stand beside you.

Substitutions in Cosmetics

(*Continued from page 41*)

tetra acetic acid tetra sodium salt is being utilized for this purpose. This latter is a splendid calcium sequestering agent, and undoubtedly can cause the soap to function as if soft water were being used, as long as it is present in a sufficient concentration to remove any calcium present, while the soap is being used. This includes the necessary presence of the agency during rinsing as well, since the calcium in the rinse water would also be capable of reacting with residual soap. A sufficient concentration to cover all such contingencies in the amount of shampoo solution or cream applied, would be somewhat high and therefore costly. A second alternative would be the issuance of the sequestering agent as a rinse, a method by which any precipitated calcium soaps could be removed.

With the increase in production of the various fatty acids in their purer state now possible because of more effective distillation methods, it is possible to obtain as high a degree of sudsing as may be desired since lauric and myriatic acids, available as such, are capable in soap form of high lathering effects. The greater irritation of soaps, attributed to a higher pH, may also be modified by the use of triethanolamine soaps. They will not be capable of as good performance as the sulfated detergents however unless a water softening process is gone through either prior to shampooing or as part of the process.

The synthetic detergent field is a most active one, and with the new products being synthesized at as great a rate as they are, it is easily possible that a new compound will be available to replace those now being used and which may not be available. If these new

compounds be of proven stability and not effected by calcium salts, there might not be any need for sequestrants. However caution should be exercised to be sure that any new agent is capable of being used under the desired conditions. The cosmetic manufacturer in the final analysis must bear the brunt of any repercussions in case his product does not perform adequately.

Castor oil was another commonly used material which became scarce because of military needs. Castor oil is used principally in hair dressings and in lipsticks. It was difficult to replace in the alcoholic hair dressings, because it is the only natural fixed oil soluble in alcohol —another reason for the trend towards emulsion dressings where more easily procurable mineral oil could be used. Its use in lipsticks was equally difficult to substitute for, since it is possessed of so high a viscosity and because its better solvent characteristics for the brominated fluoresceins employed as straining agents. There are now available several materials which might possibly be used—propylene glycol mono esters, for example, exhibit good solvency towards these dyes as do tetra hydro furfuryl esters. Compensations must be made in the rest of the formula, however, for differences in thixotropic effects and viscosities.

The materials discussed by no means constitute a full list of possible substitutions, but the constituents of it helped in World War II to solve some of the major problems confronting the manufacturer shut off from his usual sources of supplies. As stated earlier, there is no assurance that these recommendations will fit future conditions. We hope that there will be no need for scarcities to develop. We also feel that it would be helpful to be prepared for any such contingency.

Pressure Propelled Drugs

(*Continued from page 35*)

pressure propelled packages had their early discovery in the drug and pharmaceutical field, however, these were not in the form of aerosols (as mentioned above) but in the form of "Pressure Propelled Packages" for topical application. "Surfasol," as the term connotes, is the self-dispensing, by means of a liquified or compressed gas, of a substance which is intended to coat a surface.[1,17,18] The first application in this regard was made in the use of ethyl chloride as a topical local anesthetic[2] which has had universal acceptance by the medical profession. In this particular application the propellent not only performs the work of dispensing the product but actually is, in fact, the material which produces the anesthetic results.

The use of this type of package is now finding its way into a large number of dermatological applications in the pharmaceutical field, specifically in the development of topical burn remedies for minor burns where the propellent itself contributes as an anesthetic and incorporated with it are various other therapeutic agents which promote healing and prevent infection and permanent scarring of the tissue.

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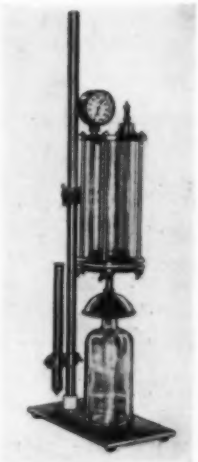
♦ Standard 2800 cc model at right consists of Pyrex glass cylinder, with all metal parts (except pressure gauge) which contact liquid made of stainless steel.



♦ Standard 100 cc 60 mm diameter laboratory filter at left has blown Pyrex glass body. Removal of pressure plug converts filter to suction type.

100 cc Pressure and Vacuum Filter

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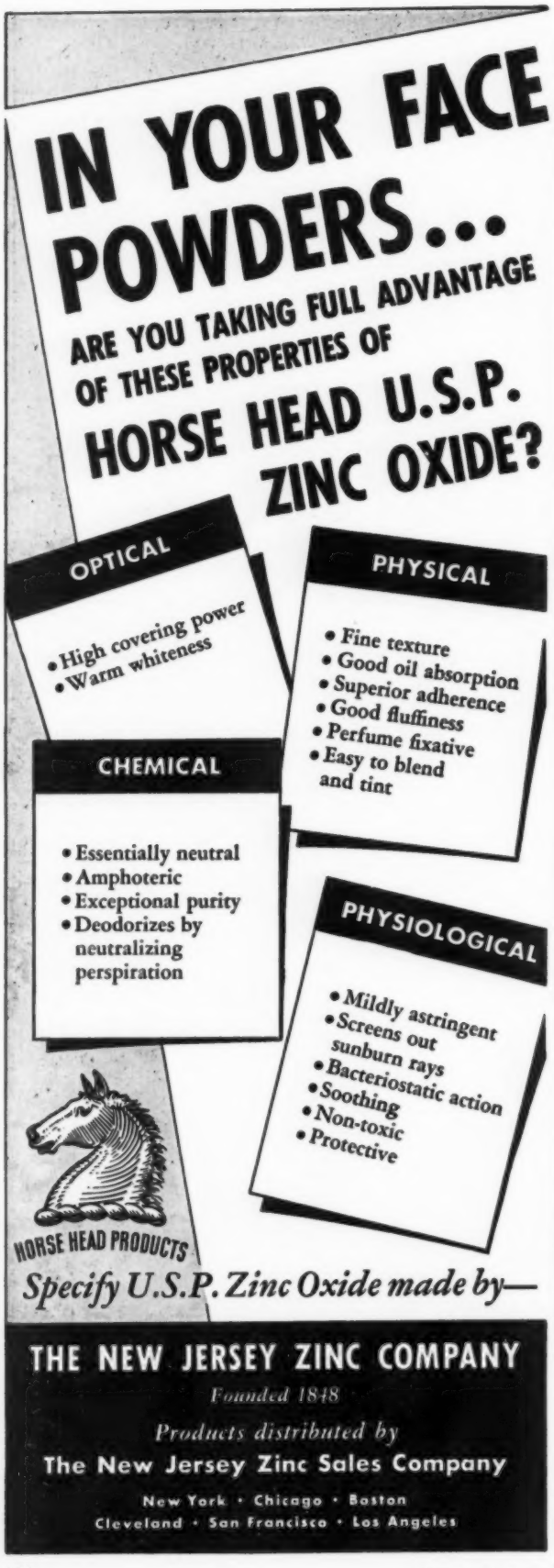

The advantages of this type of application can readily be appreciated as one realizes the immediate relief and ease of application afforded by this type of dispensing over ordinary liquids and salves. In the not too distant future, commercial products will be available—on a large market basis—for the treatment of minor wounds and bruises; infection; the treatment of athletes' foot, etc.[19]

3) *Aerated or Foam Type:* This type of self-dispensing package is enjoying wide publicity in both the food as well as the cosmetic field and offers excellent opportunities to pharmaceutical researchers. "Foam" is defined[20] as "a formation in which macroscopic, microscopic and/or ultramicroscopic gas bubbles are separated by micronic or submicronic liquid layers (skins)."

The commercial pharmaceutical application of this type product will shortly be available in the form of a pre-lathered surgical soap containing hexachlorophene. Preliminary evaluation by medical men of various conventional ointments, which have been aerated and applied, have been received with enthusiasm by patients because—oddly enough—of its pleasantness of applying and ease of application. Men of the medical profession have always recognized the value of the intangible and psychological factors which must be used in developing various medicants. Very often if the product is designed properly—psychologically—co-operation on the part of the patient is achieved readily, allowing the pharmaceutical agent optimum conditions to produce its effects.

These types of packages consist of four immediate components—two chemical and two mechanical. The chemical components are: a) the *active material* to be dispersed, and b) the *propellent*. The mechanical components consist of: a) the *valving mechanism*, and b) the *container* itself.

Although in many cases the conventional *active ingredients* are used in the various products, these—very often—have to be modified from a processing standpoint as well as from the propellent, container, and valve standpoints—particularly with regard to compatibility and corrosion. However, it should be kept in mind that it is generally unsound to develop a product around a container and valve (as well as propellent) and thus sacrifice the effiectiveness of the product for strictly the "gadget" appeal. (The scope of this article does not permit a detailed discussion of the propellent, valves or containers, but these are adequately covered elsewhere.)

In connection with the *propellents*, it might be generally said—as mentioned before—that these are either compressed or liquefied gases which are aliphatic, organic, fluorinated and/or chlorinated compounds of the methane and ethane series. Commercially they are known as "Freons" and Genetrons."[4,5,21] Among the compressed gases, the inorganic propellents—such as nitrous oxide and carbon dioxide,[22] are also utilized. The toxicological aspects of these propellents are adequately discussed by others.[23,24,25]

The *valves* are an intricate part of these types of packages and very often determine the success or the failure of the product. Ideally, the valve should be designed for the product rather than the product for the valve—this in connection with the type of spray pattern required as well as in connection with various corrosion and material problems which go into the make-up of the valves. This phase, too has been covered by other workers.[6,26,27]

The *container* must in all respects (from a corrosion standpoint) adequately contain the product as well as conform with all I.C.C. Regulations as well as other regulatory requirements.[28,29] Generally the following materials are used in the manufacture of pressure propelled containers: tin-plate; black iron with a phenolic coating; aluminum—primarily 2S and 52S; and offering a great deal of promise for the future is glass.[30,31,32]

The field of drugs and pharmaceuticals has an excellent opportunity in utilizing this method of packaging and it behooves them to keep abreast of developments in this field. It should be pointed out at this time that there are no short-cuts in the proper development of these products. Sound management dictates that the pharmaceutical and drug house select an organization that has the experience and know-how—not only from the standpoint of producton but also research facilities in the form of personnel and equipment—and work with them in order that sound products can be developed. Products cannot be developed simply by supplying a sample of "X" ingredient. It requires a detailed evaluation of all factors and this can only be done soundly by setting up a detailed project with such an organization and to follow through on the project—a follow-through which may actually take several months to many years to successfully complete.

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Patent Thoughts and Trends

(*Continued from page 85*)

invention of Carl N. Andersen and assigned to Elizabeth Arden, Inc. has recently been brought into question before the U. S. District Court for the Southern District of New York. The case has been brought by the Reheis Company, Inc., formerly known as Schofield-Donald Company, Inc.

According to the patent, astringent compositions containing an aluminum chlorohydrate have the property of retarding perspiration, do not have a harmful effect upon fabrics, have no irritating effect upon the skin, and retain their effectiveness for considerable periods of time. In comparison with aluminum chloride and aluminum sulphate, the effectiveness of aluminum chlorohydrate is said to be markedly superior. Thus, a 1 per cent solution of aluminum chlorohydrate is said to have as great an astringent action as a 15 per cent solution of aluminum sulphate. The patent attributes the desirable astringent properties of the chlorohydrate composition to the fact that the pH value is 4.38, considerably less acid than the corresponding solutions of aluminum chloride and aluminum sulphate.

The Reheis people contend that the patent is invalid for the following reasons:

1. Because the patent does not involve any invention over the following references:

United States Patents

Number	*Name*	*Date*
2,196,016	Huehn	Apr. 2, 1940
2,230,084	Montenier	Jan. 28, 1941
2,368,075	Wampner	Jan. 23, 1945
2,373,198	Roehrich	Apr. 10, 1945
2,392,531	Huehn	Jan. 8, 1946
2,409,338	Alton et al	Oct. 15, 1946

Foreign Patents

489,769	Great Britain	Aug. 3, 1938
509,815	Great Britain	July 21, 1939

Publications

Article by Govett and de Navarre in April 1947 Number of The American Perfumer and Essential Oil Review and particularly pages 365 to 368 thereof.

Article by Maison G. de Navarre entitled "Recent American Drug and Cosmetic Novelties," in the August 1946 Number (Vol. XVII) of "Manufacturing Chemist and Manufacturing perfumer" and particularly page 332 thereof.

Book by Maison G. de Navarre entitled "The Chemistry and Manufacture of Cosmetics" published in 1941 and particularly pages 262 and 264 thereof.

Book by Francis Chilson entitled "Modern Cosmetics" published in 1938 and particularly page 371 thereof.

Most of these patents and all of the publications were cited by the U. S. Patent Office in the prosecution of the application which matured into U. S. patent 2,492,085.

2. Because the subject matter had been disclosed to Andersen by the Reheis people.

3. The subject matter of the patent had been in public use or on sale in the U. S. A. for more than one year before Andersen filed his application for patent.

4. Because the Andersen patent covers nothing more than the substitution of aluminum chlorohydrate for aluminum chloride or other astringents in usual and well-known formulas, and such substitution was known by others before said substitution was first conceived of by Andersen.

RECENT PATENTS

2,527,962,2,527,963—**Parke, Davis—Beta-dimethylaminoethyl-p-methyl and (halo) benzhydryl ethers. Anti-histamines. Prevent smooth muscle spasms induced by histamine, acetyl choline or barium chloride. Useful in treatment of allergic conditions and smooth muscle spasms.**

2,528,022, 2,528,188—**Chas. Pfizer—Purification of Anti-biotics by ion exchange.**

2,529,482 — **Hoffmann-LaRoche—3-Methyl-Hexen (2)-Yne (5) Derivatives.**

2,529,498 — **Hoffmann-La Roche—Pentaenes Production.**

2,529,518 — **Schering — Cycloalkenyl Halogenated Hydroxy cinnamic acids.**

2,529,521—**Schering—Trisubstituted Acetic Acids.**

2,529,825—**Firmenich & Co.—Preparation of Cyclic 1,2-Ketols having 10 to 18 Carbon atoms in Ring.**

2,529,865—**G. D. Searle—Pyridyl Alkyl Esters of Aromatic Substituted Acetic Acids.**

2,529,886—**Artistic Beauty Products Co.—Cold Waving Process.**

2,529,982—**Maltbie Labs—1-o-Aminbenzoyl-2-Beta-Hydroxyethyl Piperidine.**

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2,530,570—**Ciba—Pyrimidylmercapto-Carb oxylic Acids.**

2,530,627—**Merck—N-Acyl Allothreonine Esters.**

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2,530,792—**Goodrich—Textile Materials Made Mildew Resistant with Di-(4-Hydroxy-Chlorophenyl) Dimethyl Methane.**

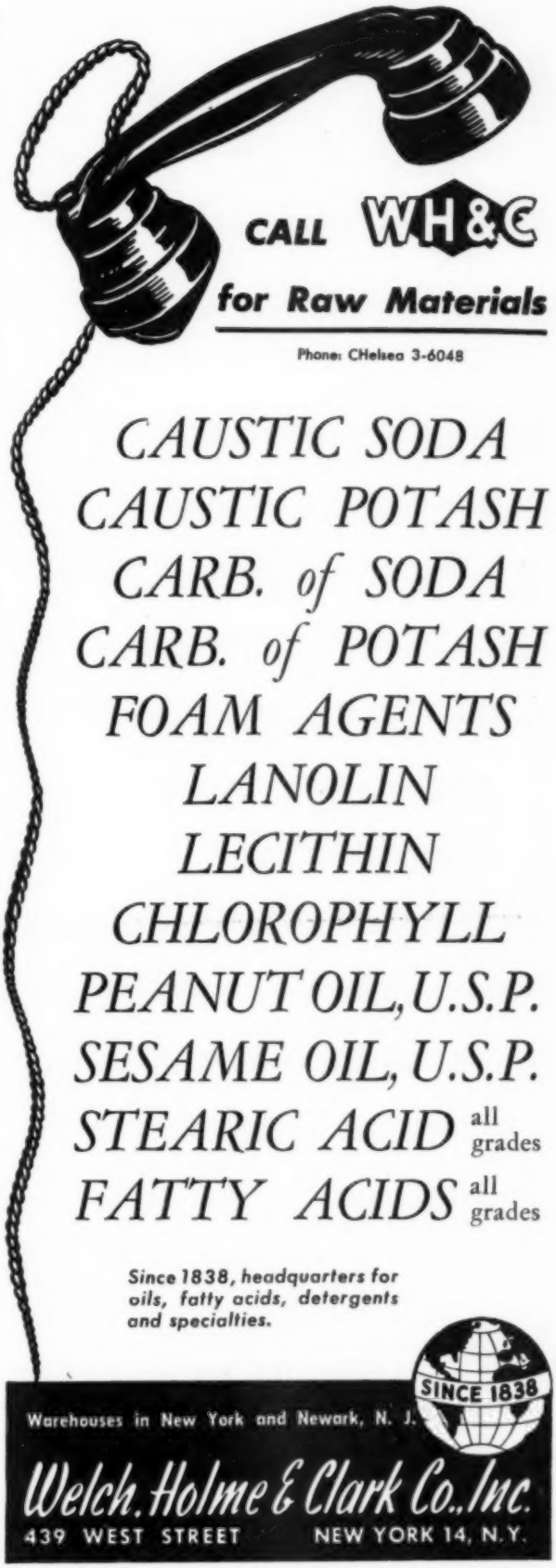
2,530,816-7—**U. of Penn.—1,3-Monomethyl Cyclopentano-polyhydro-phenanthrenes and steroids.**

2,530,831—**E. R. Squibb—Alkylene—Bridged 5,6-Dihydroxy-Quinolines.**

2,530,883—**Commercial Solvents—Purifying Penicillin Solutions.**

2,531,010-13—**Sterling Drug—Acridine Derivatives.**

2,531,097—**National Drug—Solution for parenteral administration containing tryptophane and other amino acids.**



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The New Year will witness the greatest challenge to motion pictures since talkies replaced the woman sitting behind you. Co-axial cable will link the far reaches of the nation in common suffering.

•

Hollywood's moguls, of course, offer repeated assurances that TV will never replace the movies. Argument: "Hollywood has more sensitive actors, more aesthetic writers, more inventive directors, more courageous producers and more advanced technicians." Besides, who wants to eat popcorn in his living room?

•

The film folk aren't really scared of Television as a competitor. It's just that they can't seem to convince enough paying customers that "Movies Are Better Than Ever." Box office receipts haven't been so low since managers used to carry them in their socks.

•

It's expected that the advent of Color TV will narrow the competitive gap even more. After all, how can Laurence Olivier, Bette Davis or Paul Douglas compete with a cigarette ad in color, showing your favorite announcer's tongue, larynx, epiglottis and sundry equipment under the glamorous slogan:
"Be Kind To Your Throat!"

•

And Television is becoming so informative by exposition, future physicians may have licenses issued by medical schools only through the courtesy of the Columbia Broadcasting System, NBC and Mutual. The electronic camera has shown the inside of more things than a Walter Winchell exposé.

•

Time Marches On! The quiz show is the answer to Bingo, "soap opera" has replaced the serial, and inane newsreel interviews have been succeeded by insipid Television interviews. The arts and sciences continue Upward, Onward, and, we suspect, Wayward.

•

The innovation-hungry Cosmetic Industry eagerly awaits the introduction of Color in TV. The demand for more cosmetics by actors relieves our fears that Television production opened only a new market in deodorants.

George Fiedler

KELTON
Cosmetic Company

230 West 17th Street
New York 11, N. Y.

763 So. Los Angeles Street
Los Angeles 14, Calif.

Private Label Manufacturers Exclusively
Covered by Product Liability Insurance

Cosmetics in 1951

(Continued from page 33)

"Perfume promotions, in my opinion, are an essential part of the campaign for fragrance education . . . important because they focus attention on fragrance as a fashion accessory, but such promotions are too few, and spaced too far apart, as compared with the continual round of fashion promotions in all major stores."

The rather sharp increase in the sale of cosmetics through representatives who sell direct to the housewives in their homes is commented on by Patricia Gordon, president of Princess Pat:

"Whether the 'roving dealer' is the result of our modern transportation methods, or is partly a result of some store's practice of 'switching' and substituting or a combination of these and other causes, I cannot say. The fact is that home selling has taken on important proportions and cannot be ignored by anyone interested in the cosmetic world. One guess might be that cosmetics will, like brushes or books, etc., continue to be sold by both the stores and visiting dealers.

"In this contest for the cosmetic retail business, advertising will play a very important role. The store operator seems to have an advantage over the itinerant salesman in promoting nationally advertised items. The store is strategically placed so that it can display and feature a well publicized item, and thus, no doubt, can reap a broader result from the tie-in. Alert store executives will, I believe, pay increasing attention to these promotional helps furnished by the manufacturer. Stores that may have been casual about meeting the demand created by advertising, probably will make more conscientious efforts to prevent their cosmetic trade from being channeled away. Meanwhile the home salesmen will be just as busily tracking down the customer in her castle. If we are entering a new and different era in cosmetic selling—well, all we know is that nothing is so constant as change."

Speaking on the "necessity" and "luxury" phases of the industry, Arthur G. Hadley, vice-president of Parfums Schiaparelli, says:

Both the retailer and the manufacturer should use the word "luxury" quite judiciously in referring to fragrance items. There are many fine fragrances available to the consumer at the price level they can afford. A woman may buy a serviceable and attractive dress for $29.95 . . . and even less. Another may pay $150.00 or more. Yet both garments are in proper style and satisfactorily serve their purpose. This same thought should be applied to perfumes . . . it's a necessity for good grooming and at the price level that he or she can afford."

J. S. Stein, president of Lucien Lelong, gives the following facts regarding the market conditions for perfumes:

1. The sales of colognes, toilet waters, sachets and other substitutes for perfumes have been steadily on the increase.

2. Sales of purse sizes, dram sizes and all other perfume packages selling for and around $2.00 have steadily increased.

3. Sales of perfumes in sizes from $10.00 up have been on the decrease, despite a general improvement in the economic picture and better business in most of the toilet goods sections of our retail stores.

4. The growing tendency on the part of women customers to put their large bottles of fine perfumes, unopened, "on the shelf" and *leave* them there—is evidenced by all recent surveys.

"Savings, employment and wages are at the highest peak in history and will continue to grow so that even after high taxes and high cost of living, spendable income is there to be had," observes Paul Carey, sales manager of Tussy Cosmetiques, who continues, "Recent estimates for the first quarter of this year place disposable income 20 per cent higher than for any previous period. Therefore, with these basic facts of economics in plain view, our business must continue at a greatly increased pace."

Reviewing the market for hair preparations—a class of products which had a tremendous increase in sales in the past few years, Edward J. Breck, vice-president of John H. Breck, says:

"A total of 43,919,000 women over the age of 25 have become very conscious of the importance of beautiful hair. An additional 11,224,000 women from 15 to 24 are already entering into an age when they will become important purchasers of hair preparations.

"Because of the tremendous interest in hair preparations today, which is exemplified in the many hair preparations departments in stores throughout the country, and in the increased concentration by cosmetic retailers on hair preparations, the field is presented with a distinct problem. There are many new products, many of which make claims that the more conservative in the industry feel are somewhat out of bounds.

"Hair preparations may be affected in 1951 by shortages as other cosmetic lines may be. . . . The home hair preparations volume will perhaps, in 1951, slow in its encroachment on beauty shop services as more women re-enter industry. Perhaps in the second half of the year there will be an increased trend toward professional beauty service.

"The hair preparations field has certainly stabilized during 1950, and 1951 should see more solid growth and additional recognition of the importance of this type of cosmetic to American women."

For a concise, general view of all conditions which the industry is likely to face during the coming year, we offer the following review by Northam Warren, Jr., president of Peggy Sage:

"The year 1951 will be, as everyone knows, a year of tremendous uncertainty. The most optimistic forecasters predict restrictions in supply and manpower approaching conditions of the war years. We know already that shortages and increased prices on raw materials occur daily and that more will come as the year progresses, no matter what the temporary outlook

FOUR U.S. MACHINES FOR CLEANING CONTAINERS

For Automatic Cleaning by Compressed Air

The "U. S. Sanitair" offers exclusive cleaning and bottle handling innovations that command consideration wherever automatic air cleaning of containers is desired. Write for Bulletin.

Semi-Automatic Cleaning by Compressed Air

As a two-tube machine the "E-Z Air Cleaner" is unbeatable. Requires no skill for fast operation. Furnished with compressor or air filter ready for connection to your air line. Write for Bulletin.

Automatic Bottle Handling

A—An automatic Unscrambler
B—An automatic Washer

The "Load-A-Matic" will unscramble, wash, rinse and drain automatically as high as 26,000 bottles an hour. Thorough cleaning, using a minimum amount of water. Write for Bulletin.

Bottle Rinsing & Cleaning

The "U. S. Rotary Rinser" is adjustable to any size bottle, jar or jug from ounce to including gallons. Washes inside and out on one turn. For hot or cold water or steam. Washing operation is automatic.
The above unit is also made for preparing and cleaning ampules and small serum bottles. Write for details.

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EXPORT OFFICE: Toledo, Ohio

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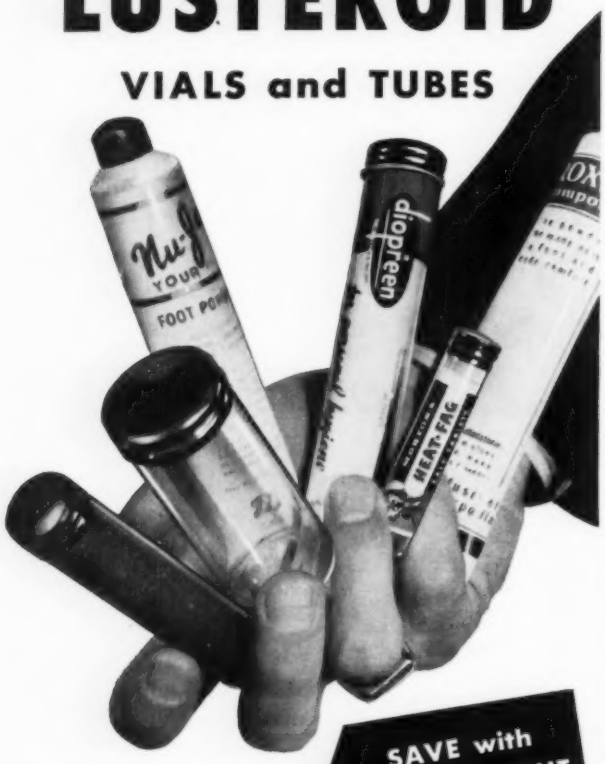

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LUSTEROID is printable. Your name and message can be an integral part of these crystal-clear containers, thus eliminating the cost of affixing labels. LUSTEROID comes in all colors of the rainbow—clear or opaque—for real merchandising appeal.

On top of these savings, you can give your products the extra benefits of LUSTEROID packaging at economical prices well within your budget.

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Sizes from ¼ to 1½ inches in diameter and lengths up to 6 inches. Cork, slip-on and screw-cap closures.

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LUSTEROID

Lusteroid Container Company, Inc.
10 West Parker Avenue, Maplewood, New Jersey

in the world situation is. Manpower will tighten and become more costly and less efficient.

"These conditions mean that manufacturers will have to increase the prices of many products. However, to date, there has been a notable discernment on the consumers' part to price rises. They are not accepting indiscriminate price increases, particularly on products on which they can curtail their use or do without entirely, which include many items in the cosmetic field. In addition, some form of government regulation on prices is expected by most of us—a rollback of prices to some point in 1950 is a distinct possibility.

"Every manufacturer will have to review carefully his costs and his turnover on each individual product. He will not be able to tie up costly and scarce inventories on the slow moving products. He will produce the tried and true sellers, ones which show him the greatest profit and turnover. He will be reluctant to spend money and time in development of new products for which there is a questionable market, or one for which he will not be able to obtain materials when it comes time to produce in quantity. Therefore, new products will be few—a beneficial by-product of this condition will be the lessening of duplication of cosmetic products.

"Inventories in particular will be a major problem with manufacturers. Every day will bring up a purchasing decision—whether to buy heavily of a critical material to protect against its shortage or increased cost. These crises on critical supplies will increase as additional controls and regulations occur, and unless the manufacturer is very careful, he is liable to have a completely out of balance inventory. On the other hand, it is necessary to have sufficient inventory—"To take stock of the situation and come up with the solution." Therefore, careful vigilance and appraisal of inventories will be a "must" this coming year.

"The manufacturer, in his review of costs, will undoubtedly look at his promotional expenditures, such as P. M.'s, demonstrators, cooperative advertisements and extra discounts. He will strive to curtail these expenses to keep his margin of profit and to hold up price increases. Promotions will only be undertaken when success appears sure. Accounts which have not given complete support will have to be pruned.

"Reduced profit margins will cause many manufacturers to review their methods of distribution. Manufacturers will look long and hard at low cost distributional outlets such as grocery super markets, and many of them will sell these super markets in increased volume. Grocery super markets have had in many localities an outstanding success in moving a volume of merchandise at very low cost, strictly by consumer preference.

"Retailers, for their part, will find it a problem to meet past years' sales volume as new promotional products will be fewer and lines will be reduced. They will have to work more closely with their manufacturers to sell the goods which are available. They will have to accept a proportion of the increased costs by making promotional dollars stretch further.

"The wise retailer will look at and examine grocery super markets to utilize insofar as possible their methods to reduce operating costs. The cardinal principle used by the grocery super markets is to sell only consumer advertised products—products on which no sales presentation is necessary. Cosmetic retailers throughout will be forced to utilize this principle in an ever increasing degree. This principle will be further emphasized as more retailers operate and formulate their buying on the yardstick of gross margin times turnover rather than gross margin alone.

"Summing it up, the year 1951 will present a challenge to the ingenuity of both the manufacturers and retailers. With its crises and headaches, it will also be a year of opportunity to those who are on their toes and anticipate the trends which would normally be a long time in coming."

The Mytinger & Casselberry Case

(*Continued from page 43*)

There are three editions of the plaintiff's advertising pamphlet, 'How to Get Well and Stay Well," which are involved in the libel seizure cases, hereinafter described: the 58-page edition which was used by plaintiff from January 1948 until a few days after the first seizure in October, 1948, and which is identified in the record as plaintiff's Exhibit #1; the 36-page
1640 edition consisting of the first 36 pages of the 58-page edition, which was used from the time the 58-page edition was discontinued up to about December 1, 1948, and which is identified in the record as plaintiff's Exhibit #2; and the 42-page edition consisting of the 36-page edition changed slightly in non-substantial statements plus 6 additional pages, which has been used from about December 1, 1948 up to the time of the trial herein, and which is identified in the recod as plaintiff's Exhibit #3.

"For Mr. Goding to represent to the reader that the basis of the alleged misbranding charge was the unrevised pamphlet which was not involved in the litigation at all is, to say the least, grossly misleading within FDA's own definition of the term and, even though done unintentionally, it inescapably colors the reader's view of the entire article.

"On page 120 Mr. Goding found it 'interesting to note that the hearing which claimant in the Mytinger & Casselberry case unsuccessfully contended it was unconstitutionally deprived of could have been obtained before even the first seizure action was commenced.' Let us look at the facts. During the case FDA admitted that on December 5, 1946, which was a year and ten months before the first seizure was made, a food and drug inspector received from Mytinger & Casselberry copies of all literature then in use, including the then current edition of the booklet 'How to Get Well and Stay Well.' Pages 726, 750. (This edition of the booklet is the one referred to by Mr. Goding.) FDA also admitted that after a hearing held in July, 1947, pursuant to Section 305 of the Food, Drug, and Cosmetic

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PEDER DEVOLD COD LIVER OIL USP High Potent
Available in all natural potencies.
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Act, which is a hearing preliminary to criminal action only, that Mytinger & Casselberry learned that FDA inspectors were questioning many Nutrilite distributors and customers; that it therefore arranged a meeting with the Chief of the Los Angeles Station of FDA and told him that it 'desired to comply in every respect with every phase of the Federal Food, Drug, and Cosmetic Act and requested said Chief to advise plaintiff if said investigation and interrogations were prompted by a belief in the minds of representatives of said Administration that any phase of plaintiff's labels or labeling in any manner, or at all, violated any provision of law***.' Defendants further admitted that Mytinger & Casselberry 'stated to the Chief of the Los Angeles District of the Food and Drug Administration that plaintiff should be notified should any question of misbranding arise in the future, and that it would do its utmost to comply with the views of the administration.' Pages 729, 751. These facts were embodied in Finding 13 of the Trial Court which added a statement that 'the said Chief advised plaintiff that the investigation and interrogations were merely routine in nature, and the said Chief made no statement implying or suggesting that the FDA had any objection to the pamphlet 'How to Get Well and Stay Well.' Page 760.

"Plaintiff's efforts to cooperate with FDA did not stop there. After the first seizure was made, many months later, Lee J. Myers, an attorney for Mytinger & Casselberry, Inc., wrote FDA under date of October 12, 1948, as follows:

Federal Security Agency
Food and Drug Administration
Washington 25, D. C.
Gentlemen:

Yesterday, my clients, Mytinger & Casselberry of Long Beach, California, received a copy of the Libel filed against certain of their products in the United States District Court for the District of New Jersey. I was immediately called into conference and it was decided to immediately discontinue the use of the leaflets entitled "Nutri-life Vol. 1, No. 3" and "Nutrilife Vol. 1, No. 1," and to delete from the booklet "How to get Well and Stay Well" all pages after page 36. This eliminates all statements and material to which objection was made in the Libel of Information.

Telegrams were sent to all general agents instructing them accordingly, and urging them to issue similar instructions to all of their sub-agents. Bulletins confirming these telegrams have also been sent to all agents in order that there may be no misunderstanding on their part.

In this connection I want to say that the filing of this Libel in New Jersey was the first intimation that we had received that any of the literature we are using at present was objectionable to your office. In the future I will appreciate it if you will advise me if you find anything in our literature that you take exception to. Mytinger & Casselberry are a reputable firm, and are desirous of cooperating with your Agency in every

possible way. I need not point out that the offense of "misbranding" is not a well defined one in the light of present day scientific knowledge, and it is very easy for a firm in the nutritional supplement field to make statements in the best of faith which do not "square" with the views of your office. In this case a letter from your Agency pointing out your objections would bring about a correction without the necessity of court action.

"Nutrilite" is an excellent food supplement, and thousands of persons have been benefited by it. I am sure that it is not the intention of your Agency to prevent the public from using it. With mutual co-operation, I believe that much trouble and expense can be saved for all parties concerned.

Yours very truly,

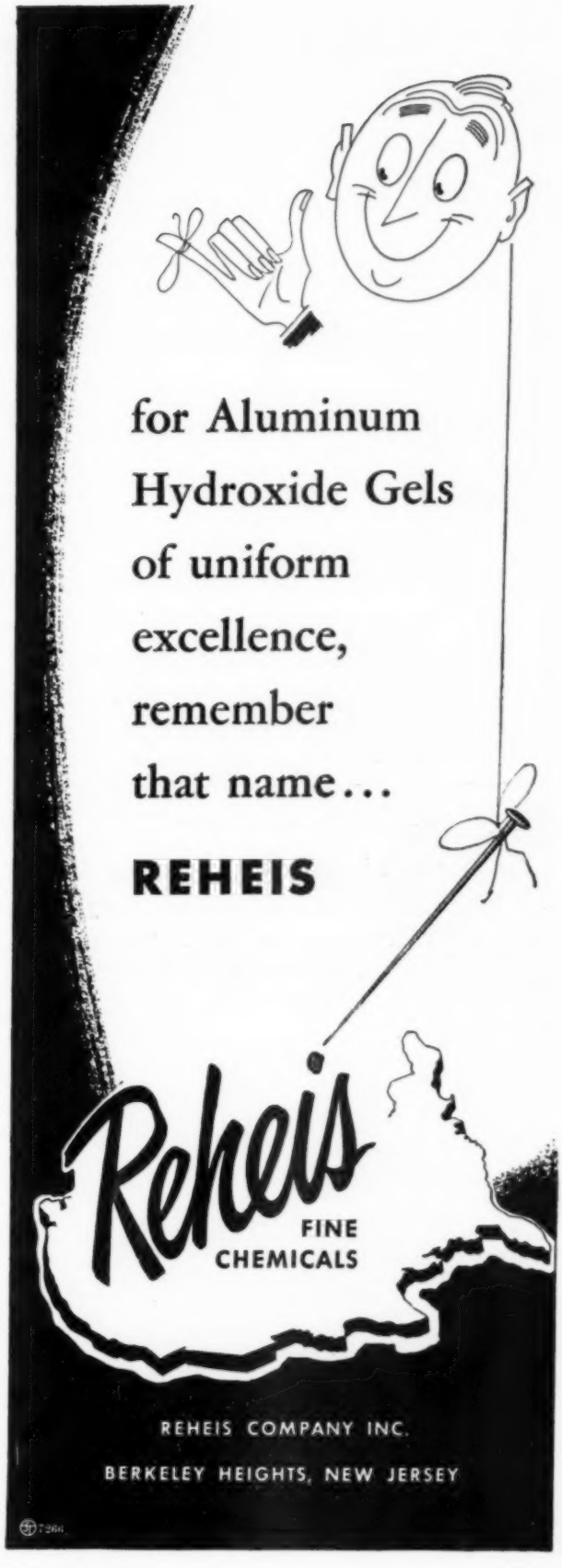
"This letter was admitted in evidence as plaintiff's Exhibit 13 and appears on page 1026 of the transcript. An answer to the letter was drawn by the Washington office of FDA and sent to the Los Angeles Station for revision and comment. When it was returned to Washington it was decided not to answer the Myers letter. The following memorandum was attached to it and placed in the file: (page 1029)

Memo re Lee J. Myers' Ltr. October 12, 1948

This letter comes up for Answer Dec. 28, 1948 Myers is astute attorney specialist in F & D cases. He is thoroughly aware of procedure. He well knows the scheme of Nutrilite is not in our opinion a slight matter to be settled by talk or correspondence. He really doesn't say anything in his 10-12-48 letter that requires an answer. Our failure to answer cannot prejudice any finding or future action. The letter may be filed without answer with this memo. /s/ John P. Harvey. Dec. 28, 1948.

"It became increasingly apparent that FDA had no intention of settling anything, even the merits of future literature except through litigation. This attitude is further revealed by a memorandum signed by FDA official A. G. Murray bearing a hand written date of 3-31-49 addressed to Division of Field Operations and concerning Nutrilite. It commences: 'As you know, the Administration plans to keep a sustained pressure against this company until an injunction is granted or the criminal case goes to trial.' It goes on to state that FDA has had mimeographed copies of the booklet made in order to expedite future seizures. Details as to how to handle Nutrilite seizure investigations were set forth with a statement that 'We hope such procedures will enable us to effect seizure more quickly***.' This document was admitted in evidence as plaintiff's Exhibit 16. FDA attorneys pointed to the large X scratched across the memo and contended that it had been cancelled and never sent out, but they nevertheless declined to put Mr. Murray on the stand to back up their statements, although the Court suggested they do so. Page 68. In this connection the Trial Court found in Finding 32 (b):

It was the plan of defendants to keep a sustained pressure against plaintiff through such seizures until



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EVERY FORM OF CHEMICAL SERVICE

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RAX POWDER

CONTAINING WARFARIN (WARF. Compound 42)

Rax Powder, a new rat and mouse killer containing warfarin, is now available for general consumer sale, following the completion of a nation-wide testing program in operation since Sept. 1949.

From coast to coast—in every type of establishment and under every type of condition—Rax Powder was reported 85-90% effective! Rax Powder offers the untrained consumer a unique means of effectively getting rid of rats and mice and preventing reinfestation.

Rax kills by producing hemorrhage. It is tasteless and odorless and therefore easy to feed to rats and mice.

Rax is available for professional use, for packaging under private label or for manufacture into prepared baits.

Rax is safe to pets and domestic animals as well as humans. Its cumulative properties make the danger of ingesting a lethal dose relatively minor. Write today for full details.

PRENTISS DRUG & CHEMICAL CO., Inc.

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an injunction was granted in the instant action or the indictment case in California based upon the discontinued literature went to trial. This plan of defendants is set forth in writing in a memorandum written by A. G. Murray, an administrative officer of the Food and Drug Administration, and addressed to the Division of Field Operations of the Food and Drug Administration. It was not denied that Mr. Murray was and is under the control of the defendants and that he was present in Court. No effort was made by the defendants to call Mr. Murray and explain the circumstances under which the memorandum was written and used. Defendant Larrick admitted that said memorandum was an accurate statement of defendants' policy in regard to plaintiff, and that said memorandum was circularized in the offices of the Food and Drug Administration and created a general impression in said offices highly prejudicial to plaintiff. The Court presumes from defendants' refusal to call Mr. Murray as a witness that his testimony not only in regard to the contents and use of said memorandum, but also in regard to the seizure recommendations presented to defendant Dunbar by him, would have been adverse to the defendants.

"The Trial Court also found in Finding 34 that a judge of the District Court for the District of Columbia 'found that the actions of the defendants in rendering said decisions were unfair, drastic, shocking, and harsh and held that the decisions of denfendants Crawford, Murray and Dunbar described supra were unlawful because the Administrator of the Federal Security Agency did not have the authority to delegate this power to make such decisions to said defendants.'

"At that time Federal Security Administrator Oscar Ewing was absent from his office because of illness and his assistant was acting in his place. Two written requests addressed by plaintiff to the acting Administrator asking for the courtesy of a hearing before making any decision of probable cause which would be the basis of further multiple seizures was refused. Pages 1163-1171. In spite of these requests for hearing, the acting Administrator made decisions of probable cause in the identical language used by the FDA officers in making their decisions which had been invalidated by the District Court of the District of Columbia.

"It is difficult for the writer to perceive how Mytinger & Casselberry, Inc., could have done any more than it did in seeking to cooperate with FDA. It may well be that the Administration frequently does cooperate with manufacturers and distributors but that has not been the experience of the Nutrilite people. Upon what basis, therefore, was the statement made that we could have obtained a hearing in the form of informal discussions before the first seizure action was commenced?

"Mr. Goding states on page 121 of your July issue that 'an honest distributor whose product has been the subject of one seizure, and who has reason to fear multiple seizures, should not waste time speculating on the Administration standards applied in probable cause determinations.' The obvious implication, of

course, is that a distributor who questions the propriety of making the probable cause determination as regards a product which the distributor honestly believes to be in compliance with law, is dishonest. Placed in the context of the article which deals with the Mytinger & Casselberry case and Nutrilite, the obvious implication is extended to encompass the Nutrilite people within the 'dishonest' classification. There is a growing tendency on the part of some Administrative officials to view those who question any actions of bureaucrats as being dishonest or unethical. 'The king can do no wrong.' Yet there are some, even in this modern age, who believe that Government officials are human beings, and that sometimes even the best may err. It is a dangerous concept—that one who resists abuse of administrative power is necessarily a criminal.

"Incidentally, the author properly brings out the fact that the Food and Drug officials are possessed of considerable discretion, and that they need not recommend an enforcement proceeding in cases of minor violations. As a matter of practice, however, as Mr. Goding must know, the Food and Drug Administration doesn't always avail itself of its discretionary powers conferred by Congress. For instance, Section 304 of the Act permits the transfer of libel actions to the claimant's home district if Food and Drug Administration is willing to so stipulate. The discretion thus given the Food and Drug Administration is obviously for the purpose of enabling a claimant to try a libel case in his home district where he would be subject to undue hardship if he had to travel to another judicial district for trial. However, FDA has announced that it never exercises its discretion in these cases because it doesn't want the responsibility of determining whether or not a claimant is entitled to such a stipulation. This official position was revealed by George P. Larrick, Associate Food and Drug Commissioner, during the trial of the Mytinger & Casselberry case. He testified that 'we wanted to maintain the fundamental principle that we didn't want to transfer jurdisdiction to the home district because if we once did it we would have an awful time deciding when we should and when we shouldn't do it.' Page 388. In view of the fact that Food and Drug Administration expressly refuses to exercise a discretion specifically vested in it by the Food, Drug, and Cosmetic Act, it would seem hazardous to rely upon its exercising discretion in a claimant's favor in any other instance.

"On page 122 of the article appears the statement that the second practical approach to stave off further seizures is to discuss the matter with the FDA. At least in the case of Nutrilite, which action is tied into this statement by obvious implication, attempts to obtain such a meeting have always been repulsed. This letter has already recited the facts.

"As I stated in my original letter, it isn't my purpose to attack Mr. Goding personally, nor to question his motives. His article is ably written. I believe that the misstatements made were, as mentioned in my letter, inadvertent. The important thing is not whether

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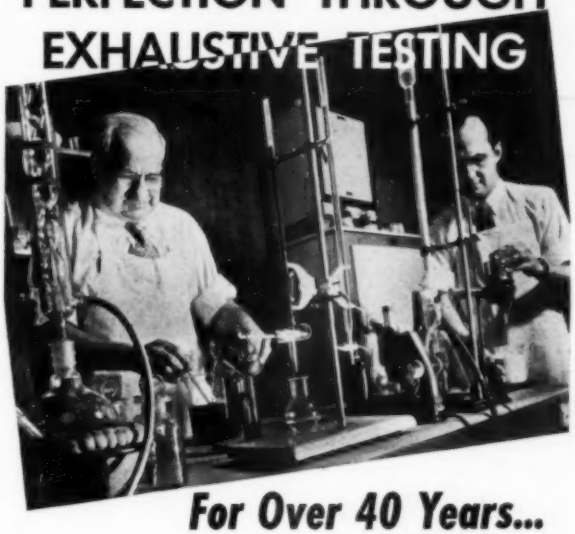

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KOLAR—created cosmetics stand up in use . . . as they stand out in consumer preference. Whether you have a formula problem, a manufacturing difficulty or only an *idea* for a new cosmetic, write without obligation to:

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either Mr. Goding or myself is correct as to facts. The important thing is as to the meaning to industry in general of the Supreme Court decision. After all, there has not yet been presented to your readers a different interpretation of the Supreme Court case. There has already been written a review of the trial before the Three-Judge Court which sets forth in large part the view taken by my colleagues and myself of the far reaching policies inherent in the decision. This article appears in the July, 1950 issue of the New York University Law Review. It was written before the Supreme Court opinion was announced but was published afterwards. It carries a footnote to the effect that although the Supreme Court reversed the District Court, the writer of the Law Review article still agrees with the result reached in the District Court. That writer, like myself, does recognize 'the function of the Supreme Court in our system of jurisprudence' but in common with all other attorneys, also recognizes the right to criticise what is thought to be a bad decision.

"In common with Mr. Goding, I believe that the F.D.C. Act should be the subject of vigorous enforcement. However, I also believe, as do many others, that enforcement should be for the purpose of protecting the public rather than to satisfy an administrative thirst for power. I also agree that it is better to comply with the law than to evade, but claim the right to fight against abuse of power and for the common concepts of fairness. Perhaps my close association with the case has created a bias which is difficult to shake. I mentioned that in my earlier letter. In any event, I still feel that industry is entitled to the other side of the picture."

The Refill Problem

(Continued from page 31)

Humphrey Bill came to their attention. Seeing in this proposed piece of legislation a granting of power to the Food and Drug Administration which would make that agency a dictator as to what could and what could not be used in self-medication, the industry immediately acted to oppose this provision of the bill.

The issuance of this regulation by the Food and Drug Administration puts pharmacy on notice as to just where it stands with reference to possible action by the FDA against pharmacists in the refilling of prescriptions. Despite the fact that Commissioner Dunbar stated that no prescription could be legally refilled, the new regulation apparently represents the extent to which the FDA legal brains believe they could sustain in the courts any power which they might possess to prevent refills. Any attempt to prevent refilling of prescriptions for products which can normally be sold over counter for self-medication would not appear to be a very firm basis upon which to go to court in an attempt to substantiate the power of the FDA over prescription refilling.

To all intents and purposes the issuance of this new regulation by the Federal Security Administration should eliminate any need for immediate enactment

of any legislation bearing on the matter of prescriptions, and therefore, the Durham-Humphrey Bill should become a dead number. If the differences of opinion existing between the N. A. R. D. and the A. Ph. A. can be resolved, probably the entire drug industry can agree on a common solution to the entire question of prescriptions under Federal law and then reach an agreement on the subject with the medical profession. For even though the new regulation might prove to be a satisfactory solution to the uncertainty which prevailed before its promulgation, there still remains the question of telephone prescriptions, as well as some other situations regarding prescriptions which should be clarified.

Cross Roads for the Druggist

(Continued from page 37)

It is difficult to see how the druggist, who would separate himself from this low-cost, mass distribution of consumer conveniences and who would profit by his technical knowledge and his professional reputation could allow himself to be lost in this competitive jungle where he is so distinctly at a disadvantage.

About 4,000 independent druggists have avoided this jungle and have today a fine profitable perfume and cosmetic department which, so far as products, services and prestige go, are not in competition with super-markets, self-service, vending machines or any other low-cost, mass retailing operation.

These druggists treat perfumes and cosmetics as a specialty department. They give it ample space, ample stock, trained, specialized selling and they conduct their entire store as a fine, prestige operation. The perfume and cosmetic business of these stores runs from 20 per cent to as high as 40 per cent of their entire retail volume. Because they stock and sell products which require informed, competent selling at the retail counter, products which have a relatively high unit value, they build a community clientele for these perfumes and cosmetics as relatively stable and inherently a natural part of their business as prescriptions.

The perfume and cosmetic manufacturers who use selected distribution because they believe that their products need intelligent, advisory retail selling, and because they believe that their products must have the kind of retail environment which supports the eithical character of their prestige, have hardly been able to find more than 4,000 independent drugstores out of the 54,000 in this country which fulfill these requirements. True, some of these other drugstores have developed highly specialized and profitable departments in some field other than perfumes and cosmetics; some have preferred an emphasis on prescriptions and professional services. But many competent observers in this branch of perfume and cosmetic manufacturing, i.e., the class products of selected distribution, are certain that there is ample room and opportunity for several thousand additional druggists to conform to this pattern of retail selling.

The perfumes and cosmetics of this large, diversified division of the industry are very profitable, preferred

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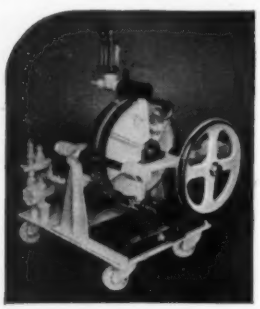

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retail goods. Recently the head of a leading department store classified these products as the second most profitable department in his store.

To succeed with these perfumes and cosmetics, the druggist will need full-time, trained, specialized sales help. He will have to work in intimate cooperation with manufacturers in selling. He will have to give this department adequate and preferred space. His entire store, in its interior arrangement, order and cleanliness, will have to conform to this department.

For many druggists who would like to establish a leading position in their community for perfumes and cosmetics, these qualifications may seem demanding or over emphasis on one class of products. But 4,000 druggists have found this specialization very profitable. Their mental disturbance at the diversion from their store of self-service staples is incidental and is tempered by the confidence of a man who knows that he is travelling a different and a profitable path.

There are many resources and contacts in the industry for any druggist who wishes to study such a specialized department. Perfume and cosmetic salesmen can be a great help. They can suggest stores in nearby communities which the druggist can visit and study. Most manufacturers have a fund of information and can help substantially in sales training. The inquiring druggist who is interested and who is willing to meet those requirements of specialization essential to his own success in this field will not lack help and information.

Chlorophyll as a Deodorant

(Continued from page 39)

wounds. These patients had been draining profusely for months and were so malodorous as to deprive patients and attendants of appetite. Personnel passing down adjacent corridors also made unfavorable comment on the very pervading and unpleasant odor. Our first observation on beginning use of chlorophyll was that this odor immediately disappeared and next we observed a great improvement in appearance of the wounds with marked acceleration of wound healing. Soon, other patients in neighboring beds began to request treatment with the "green medicine" because they, too, observed the rapid progress after months of drainage and odor. In our hands, chlorophyll has been far superior to penicillin in deodorizing wounds. This lack of odor in the "bone infection" wards has also been a matter of spontaneous comment by U. S. O. show troopers who have been accustomed to the bad odor of such cases in this country and abroad."

In concluding his report, Bowers also observed that, when chlorophyll was used for infected wounds, the medical officers were impressed by the rapid disappearance of objectionable odors and by the remarkable cleanliness of the wound within two or three days.

These findings are in accord with the more recent studies made by Moss and his associates[16] under the auspices of the Therapeutic Trials Committee of the

Council on Pharmacy and Chemistry of the A. M. A. They too found that chlorophyll consistently acts as an effective deodorant when used on foul-smelling wounds.

In passing it should be mentioned that the material used by Bowers as well as that employed by Smith and by Moss and his colleagues was supplied by the Rystan Co., Inc., Mount Vernon, N. Y. Its chlorophyll preparations are available under the "Chloresium" trade-name.

A chlorophyll-containing dental ointment and a tooth paste made by this organization have also been found to have deodorizing properties. Pertinent in this connection is Goldberg's[17] report on the use of water-soluble chlorophyll in oral sepsis. He found, among other benefits, that odors due to anaerobic infections invariably disappear with a few applications of chlorophyll.

However, other types of mouth odors have responded to the use of chlorophyll-containing tooth paste. This was well indicated in the rather comprehensive investigation made by Rapp.[5] He presented evidence of the effectiveness of the chlorophyll tooth paste in lowering the acid count of the mouth, in acting to prevent the formation of the bacterial acids associated with tooth decay, and in retarding the break down of protein parts of tooth enamel—all of these being presumed causes of decay.

His report also stressed the ability of this chlorophyll tooth paste to deodorize the mouth and retard the return of offensive odors. The studies on the deodorizing properties of the tooth paste showed that a single brushing lowered mouth odor considerably below the point felt to be objectionable and held it there for more than two hours. A control paste, chosen out of several commercial brands for its superiority in lowering mouth odor, was markedly inferior to the chlorophyll preparation in this respect. In this work 45 young, normal adult males were used to check the deodorizing efficiency of both the test (chlorophyll) tooth paste and the control product.

The newest phase of utility of chlorophyll's deodorizing action stems from Westcott's[1] study. Actually his investigations covered a period of years and the effects of chlorophyll on body and breath odors was one of three fortunate "accidents." Thus, while studying the effects of certain chlorophyll fractions in the treatment of anemia, he observed that the odors of foods and vitamin B_1, usually detectable in the urine, were greatly decreased when the patients were taking the chlorophyllins. This indicated that some change was taking place in the metabolism of these ordinarily odorous compound. On the basis of these observations, Westcott decided to make a more detailed, specific study of the effects of chlorophyll on perspiration and breath odors.

The first step was the establishment of an *in vitro* method for testing the efficacy of the several chlorophyll derivatives or fractions. This was done by incubating the test materials with a dilute solution of benzyl mercaptan, a compound with a persistent offensive

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odor characteristic of the skunk. Determinations of odors were made at definite intervals by means of the Fair and Wells osmoscope.

This was followed by tests on humans; five assistants being trained in the use of the osmoscope for accurately estimating body and breath odors. Tests with this group of individuals showed that the administration of the chlorophyll derivatives in doses of 65 to 200 mg. caused a 56 to 100 per cent reduction in detectable underarm odor. To confirm these findings, the tests were repeated on a group of 12 college girls, including four Negro girls. As shown by osmoscope and direct smelling tests, the ingestion of tablets containing 100 mg. of chlorophyll rendered perspiration odor undetectable in over 90 per cent of the cases.

Subsequently a number of other individuals were given chlorophyll tablets and were requested to give their own subjective observations with respect to body odor effects. At the time of Westcott's report, 90 per cent of these persons had reported favorably on the relief of body odors. It was also found that the average dose required was 100 mg., usually taken at breakfast or immediately after.

From these data, Westcott concluded that the chlorophyllin tablets are effective in neutralizing the obnoxious odors of the body from perspiration; the effect lasting for 18 or more hours. It also appeared that at least one hour should be allowed for effective absorption before favorable effects can be expected.

Several months later, Serling[18] cited the results reported by a group of ten individuals. From these observations, it appears that the ingestion of chlorophyll in tablet form effectively neutralizes the obnoxious odors from perspiration due to physical exercise, nervousness, and illness. The tablets were also effective against unpleasant foot odors, menstrual odors, and urine odors from ingested materials.

A large part of Serling's study was devoted to the effect of chlorophyll on dogs and cats, where the animals' body odor made them unfit as house pets. Following observations on 21 dogs of different breed, he stated that chlorophyll fractions, given orally in doses of 100 mg. per 25 pounds of body weight, aid in eliminating most objectionable body and mouth odors in dogs within 18 to 24 hours. He, therefore, is of the opinion that chlorophyll fractions are useful adjuncts in the control of body and mouth odors in animals. He feels that they serve a practical purpose in eliminating malodorous substances until the cause of the trouble can be determined and corrected.

This investigator also found that, in proper dosage, chlorophyll fractions are nontoxic, well tolerated and apparently do not affect normal digestive activities. In considering the mechanism by which the effects are produced, Serling observed that chlorophyll fractions apparently act as catalysts in neutralizing malodorous substances of neutral, acid or basic reactions.

In the most recent report, Montgomery and Nachtigall[19] paid particular attention to the effects of orally administered chlorophyll fractions on body odors.

For this purpose a group of 25 employees from a large industrial plant was selected to represent the usual activity of working people. A second group of 20 college athletes were chosen for the study of perspiration odors of young persons after vigorous exercise. Underarm odor was used for this study because it provides an easily accessible, commonly accepted area associated with objectionable body odor. Actual testing was done by physicians using the Fair-Wells metal osmoscope. Placebo tablets were used in control studies with a number of individuals.

Osmoscopic readings showed that chlorophyllins prepared by the Westcott method, in doses of 200 mg. daily, effectively reduce the measurable underarm odor in both industrial workers and in college athletes. Subjective observations by individual workers, as well as by members of their families, also indicated that a definite degree of body odor change had occurred. The subjective views of the college athletes were also very indicative. All of them noticed a decrease in perspiration odor on their bodies while taking the chlorophyllins, and 80 per cent observed less perspiration odor on their street clothes.

Montgomery and Nachtigall did additional work with a group chosen to demonstrate odors due to various illnesses. Although only nine cases were studied, the results were quite encouraging with respect to the influence of chlorophyll on odors from pathological conditions. The odors were all greatly decreased except in a case with radiation ulcer. However, a larger dose of chlorophyllins, 300 mg. per day, is required.

In addition to the influence of chlorophyll on body odor, data are available concerning its effect on breath odors. Thus, in the studies conducted by Westcott, 12 subjects were given varying amounts of grated onion or onion juice by mouth. These tests showed that the odor remaining after eating onion is due to the particles remaining in the teeth and crevices of the mouth. It was found that careful rinsing with a solution of chlorophyllins or dissolving a tablet in the mouth will speed the cleansing process and make it more permanent. However, this procedure is effective only if the mouth is cleaned. Other clinical observations, covering a two-year period, showed that the chlorophyll fractions effectively neutralize unpleasant odors in the mouth from foods, beverages, tobacco, faulty oral hygiene or metabolic changes ordinarily described as halitosis.

The attention given Miale's[20] survey on chlorophyll and Westcott's[21] report on the material's uses, as presented at the December 7, 1950 meeting of the Proprietary Association's Scientific Section provides a good index of manufacturers' interest in this subject. Although a trend was already apparent, there is little doubt that the public's interest in chlorophyll was greatly stimulated by De Kruif's[22] article in *The Reader's Digest*. As a result, quite a number of chlorophyll products have appeared on the market and there seems to be no question but that others are being readied. Indeed, volume production of chlorophyll

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tablets has been announced[23] by one of the leading private label tablet makers.

In a procedure reminiscent of that used with the ammoniated dentifrices, several companies have been licensed under the "Westcott Process" for which a patent is pending. This is being handled by Walker Vitamin Products, Inc., Mount Vernon, N. Y., which puts out its own chlorophyll preparation under the "Olodex" trade-mark. Other licensees under this pending patent include the De Pree Co., Holland, Mich. makers of "Nullo," the Pitman-Moore Co., Indianapolis, Ind., producers of "Chlordor," and the Chas. E. Frosst Co., Montreal, Canada, Manufacturers of "Sudroma." All of these products are indicated for both body and breath deodorization.

Other manufacturers who make similar claims for their products, but are not licensed under this pending patent, include the Pearson Pharmacal Co., New York City, with "Ennds" and Stur-Dee Health Products, Brooklyn, N. Y. with "Klo-Nodor." Still others limit their claims to breath deodorization only. In this group are "Stoppers," made by Stoppers, Inc., New York City, "B-Shur," produced by the Woodley Co., Chicago, Ill. and "Squair," being instructed by the Chlorophyll Products Co., also of Chicago.

Of course other angles are being investigated, as, for example, the incorporation of chlorophyll into chewing gum or gum coatings. There also seems to be a need for more extensive, perhaps more impartial studies of the general effect of chlorophyll as a deodorant on oral administration and of the efficiency of individual chlorophyll derivatives. In the meantime, as suggested by De Kruif, victims of halitosis and body odor will do well to get the advice of their dentists and their doctors. It is better, says he, to correct dental caries or disturbed body chemistry, if possible, than to mask the conditions with chlorophyll. For many of those who cannot be benefited by medicine or dentistry, chlorophyll can be a great boon.

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*International Assoc. for Dental Research, Chicago, June 24, 1949.

The Pilot Plant

(Continued from page 45)

The Pilot Plant is shaped as an inverted "U," with the open part of the letter on a center aisle through the

laboratory. In the center of this "U" shape is an "H" shaped table. Under all counters or tables are cabinets of various sizes. Standing at the open part of the "U," looking toward its base, the description is as follows. The walls starting to the right and progressing counter-clockwise can be described as; (1) an inside blank wall with a low bench on which are mounted all dusty equipment, or equipment which emits steam or vapors and a large steam bath. A hood covers the entire length of this wall. (2) The wall forming the base of the "U" is an outside wall with three windows. A high bench is along this wall and contains no equipment other than a sink and necessary services. This bench is kept free for packaging, distillation set ups, etc. (3) This wall is a glass partition division from the rest of the laboratory. At one end of this bench is a small hood with complete services and a small steam bath. This bench is used for balances, weighings, and measuring operations. Under the bench is a large adjustable constant temperature oven.

In the center of the "U," the "H" table contains the major portion of the equipment and is serviced by 110 and 220 volt A.C. electric service, 110 volt D.C. service, gas, compressed air, hot and cold water, and steam.

The floor is hard wood, painted and the walls are covered with a tile board, having a high gloss finish. The benches are 31 and 37.25 inches high. While 31 inches doesn't seem high and is suitable for some equipment, it is entirely too high for other tall machines. It means that a set of portable steps must be provided and shifted around as required. This situation could be improved. Tall equipment should be raised not over 12 to 18 inches from the floor. This would make use and cleaning of such equipment much more in line with good design.

We admit that the description given here does not bear out all the suggestions made for the ideal design of a Pilot Plant, but we learn by experience. It is through the years of experience with this particular plan that the suggestions for a better plant have been made. In our case, space has become a problem, and where space is available, permit plenty of room around each piece of equipment. Also, allow plenty of room for expansion and the addition of more units.

When specific equipment is mentioned, it is not to be construed as approval, or, to infer that other similar units will not accomplish the same result and work just as well. Equipment names, therefore, are used for illustration only. The following units have been found quite versatile and useful in both pharmaceutical and cosmetic compounding work in our laboratory.

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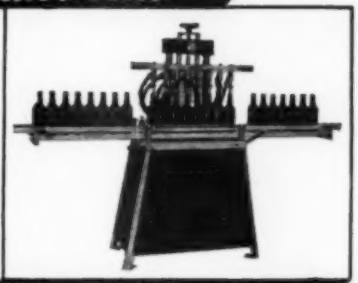

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in mixing powders and creams. They can be used for slow speed stirring of heavy liquids where desired.

4. Abbe Lenart Mixers, two sizes, for mixing and smoothing ointments. These are high speed attrition mills and work well on tooth paste and suspended materials.

5. Vacuum Oven. This we have used for rapid low temperature drying of powders, etc.

6. Paint Mill. While this type of equipment is somewhat old fashioned, we still use it for a number of purposes, particularly for very fine grinding of powders in ointment or grease bases.

7. Hand Operated Tablet Press. For compressing tablets or slugs.

8. Tablet Coating Pan. This unit has been used for coatings of various types on a wide variety of materials.

9. A Hand Operated Tube Closer. For clipless closing of metal tubes.

10. Steam Kettle with Stirrer. While this particular unit has application in the pharmaceutical industry, it may not have very much application in cosmetic work. It can be used, however, where evaporations are to be made, where temperature is not important and solvent recovery not part of the process.

11. Pebble Mill. Used for grinding of small amounts of materials to a very fine degree.

12. Cutter Mill. Used for coarse grinding of drugs and other materials.

13. Hammer Mill. Fine to very fine grinding. Blending of dried pigments and the dispersing and blending of flavors, perfumes, etc. in powders.

14. Eppenbach High Speed Mill. Cream emulsification and ointment grinding.

15. Miscellaneous. Electric hot plates, electric stirrers with speed controls, small centrifugal pumps, and constant temperature water baths.

While the following may not have much application in cosmetic product manufacturing, they do have definite use in drug work. Reference is made to various types of glass joint apparatuses. For drug work, it is frequently advisable to have available a series of crude drug extraction units for open gravity percolation and for closed continuous type extractions. The former uses the familiar drug percolator while the latter, the Soxhlet extractor and the large Soxhlet for quantity drug extractions. In either case, additional equipment for solvent recovery is desirable. This equipment can be expanded almost indefinitely. Basically, however, it consists of flasks, condensers, connectors, a constant temperature water bath and a vacuum pump and control. For the recovery of solvents, a series of glass rectifying columns are frequently found of value.

One piece of equipment found useful but not absolutely necessary, is a temperature recorder. This unit will give a constant recording of temperature in a process or unit for prolonged periods of time. Such a unit in a research laboratory will frequently be borrowed by the plant for standardizing equipment. We have a Brown Electronik Strip Chart Recorder, which is

mounted on a metal cabinet fitted with casters. Connecting cord and ground wire are 50 feet in length and connecting wire to thermocouples is about 25 feet long. This permits use in practically any location where such a unit is desirable.

While not absolutely necessary, a small hand-operated filler unit will be found to be quite convenient and a time saver. This is especially true when samples are being packaged for clinical trials or consumer acceptance tests. Such a filler can be used for liquids, semi-liquid creams and for the lighter consistency creams, ointments, etc. Jars, tubes and bottles can be filled. Such a unit used in conjunction with the tube closer will produce an acceptable package for any use.

It is impossible to discuss at length each piece of equipment as to applications which might be made. Individual ingenuity in applying equipment becomes the guiding factor. The ability to "see" a process cannot be taught, it can be acquired by observation of details and experience with results of equipment on various products.

Several illustrations can be made, however, to show what can be done along this line of reasoning. First is the homogenizer. Liquid emulsions of all types can be processed through this unit. Mineral oil emulsions for drug use as well as liquid or semi-liquid cosmetic emulsions. Second, the so-called colloid mill, or high-speed grinding mill can be used to grind or smooth drug ointments and at the same time, many cosmetic cream and semi-liquid lotions or creams can be processed through this equipment to advantage. Third, the super centrifuge. In many cases because of sludge or slimy like precipitates or sediments, filtration in the usual sense of the word is not practical. A centrifuge can be used frequently to advantage in these cases. There is a word of caution which should be given here. A centrifuge will operate opposite to its usual intent with some types of precipitate. In these cases, the insoluble material will be dispersed to a greater extent than before and then of course, the original condition is accentuated rather than remedied.

It is recognized that cosmetics have many problems peculiar to that branch of manufacturing. It is also recognized that many cosmetic problems are parallel to those of the pharmaceutical industry. We are both seeking to make products that are stable, useful for the purpose intended, and will be acceptable to the consumer. It is only through adequate laboratory facilities that a product is developed fully and rounded out to meet these requirements. Laboratory facilities should include the well equipped Pilot Plant to enable the scientific personnel to exercise and develop to full extent the possible potential of any preparation. Naturally, this can only be accomplished with the aid and advice of the Medical Department and through analysis of replies on clinical and consumer testing.

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